STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL	1. WELL NAME and NUMBER: NBU 921-21F4S
2. TYPE OF WORK: DRILL NEW WELL (●) REENTER P&A WELL ( ) DEEPEN WELL ( )	3. FIELD OR WILDCAT: NATURAL BUTTES
4. TYPE OF WELL: Gas Well Coalbed Methane Well: NO	5. UNIT or COMMUNITIZATION AGREEMENT NAME: NATURAL BUTTES
6. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. OPERATOR PHONE: 720 929-6587
8. ADDRESS OF OPERATOR: P.O. Box 173779, Denver, CO, 80217	9. OPERATOR E-MAIL: mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE): UTU-0576 / 11. MINERAL OWNERSHIP: FEDERAL (●) INDIAN ( ) STATE ( ) FEE ( )	12. SURFACE OWNERSHIP: FEDERAL ( ) INDIAN (●) STATE ( ) FEE ( )
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN'): Ute / 18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS: YES ( ) (Submit Commingling Application) NO (●)	19. SLANT: VERTICAL ( ) DIRECTIONAL (●) HORIZONTAL ( )

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2329 FNL 708 FWL	SWNW	21	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	2350 FNL 2535 FWL	SENW	21	9.0 S	21.0 E	S
At Total Depth	2350 FNL 2535 FWL	SENW	21	9.0 S	21.0 E	S

21. COUNTY	22. DISTANCE TO NEAREST LEASE LINE (Feet)	23. NUMBER OF ACRES IN DRILLING UNIT
UINTAH	708	1480
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed): 20	26. PROPOSED DEPTH: MD: 10544 TVD: 10100
27. ELEVATION - GROUND LEVEL: 4838	28. BOND NUMBER: WYB000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE: Permit #43-8496

ATTACHMENTS

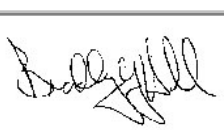
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME Kevin McIntyre	TITLE Regulatory Analyst I	PHONE 720 929-6226
SIGNATURE	DATE 09/17/2008	EMAIL Kevin.McIntyre@anadarko.com

API NUMBER ASSIGNED
43047501040000

APPROVAL



Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2600		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2600	36.0			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	2600			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Foamed Cement	215	1.18	15.6

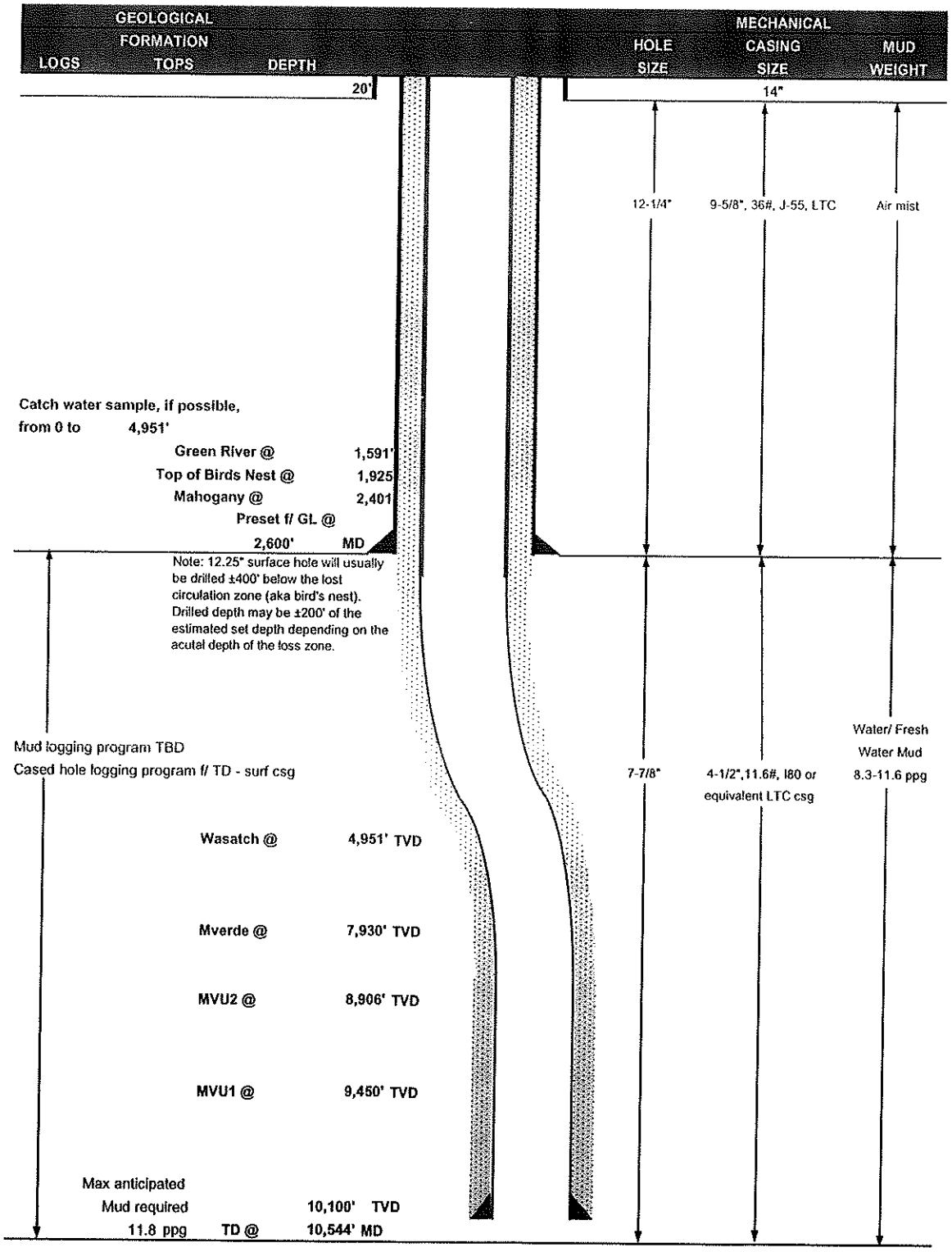
Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	10100		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	10100	11.6			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	10100			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Lite High Strength	430	3.38	11.0
			Pozzuolanic Cement	1490	1.31	14.3

KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	September 4, 2008	
WELL NAME	NBU 921-21F4S		TD	10,100' TVD	10,544' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	ELEVATION	4,838' GL KB 4,853'
SURFACE LOCATION	SWNW 2329' FNL & 708' FWL, Sec. 21, T 9S R 21E				
	Latitude: 40.022475	Longitude: -109.562944		NAD 27	
BTM HOLE LOCATION	SENW 2350' FNL & 2535' FWL, Sec. 21, T 9S R 21E				
	Latitude: 40.022422	Longitude: -109.556422		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA(SURFACE), UDOGM, Tri-County Health Dept.				



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
						3520	2020	453000
SURFACE	9-5/8"	0 to 2600	36.00	J-55	LTC	0.89	1.66	6.16
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 10100	11.60	I-80	LTC	1.96	1.02	1.88

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.8 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4040 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE Option 2		NOTE: If well will circulate water to surface, option 2 will be utilized					
	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite +.25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,444'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	430	40%	11.00	3.38
	TAIL	6,100'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1490	40%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

NBU 921-21F4S
Twin to NBU #127
SWNW Sec. 21, T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

Formation	Depth
Uinta	0- Surface
Green River	1591'
Bird's Nest	1925'
Mahogany	2401'
Wasatch	4951'
Mesaverde	7930'
MVU2	8906'
MVL1	9450'
TVD	10,100'
TD	10,544'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

Substance	Formation	Depth
	Green River	1591'
	Bird's Nest	1925'
	Mahogany	2401'
Gas	Wasatch	4951'
Gas	Mesaverde	7930'
Gas	MVU2	8906'
Gas	MVL1	9450'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. **Proposed Casing & Cementing Program:**

Please see the Natural Buttes Unit SOP.

5. **Drilling Fluids Program:**

Please see the Natural Buttes Unit SOP.

6. **Evaluation Program:**

Please see the Natural Buttes Unit SOP.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,100' TD, approximately equals 6262 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4040 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the

surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi.

The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

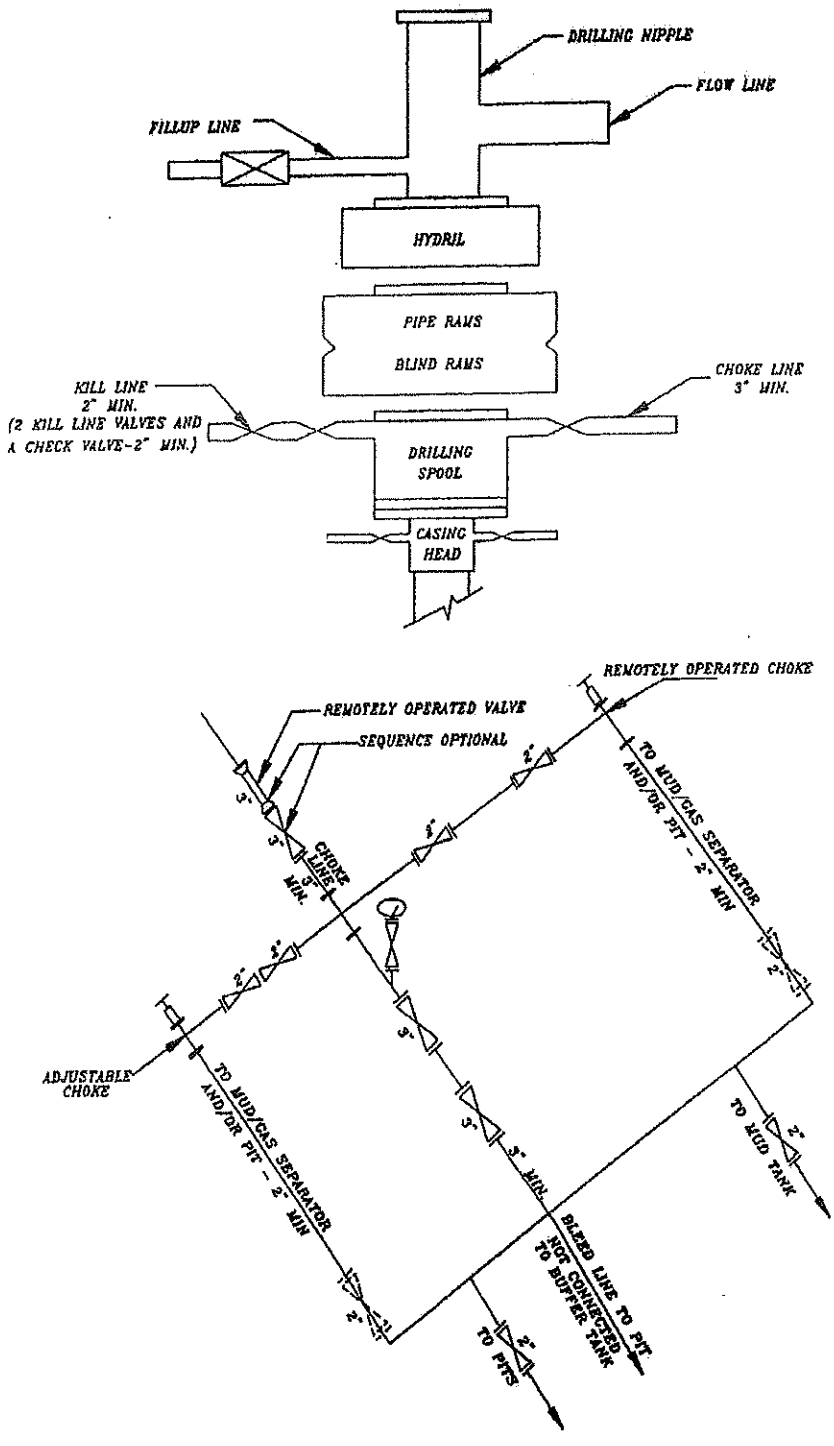
Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 921-21F4S

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 921-21F4S
Twin to NBU #127
SWNW Sec. 21 ,T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

   Refer to the attached location directions.

   Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

   No new access road is planned, as this is a twin location. Refer to Topo Map B.

   Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

   Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. **Location of Existing Wells Within a 1-Mile Radius:**

   Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

   Please see the Natural Buttes Unit SOP.

   Refer to Topo Map D for the location of the proposed pipelines.

   A 2600' rights-of-way will be required. Approximately 2600' of 4" steel pipeline is proposed from the location to the tie-in point in Section 16, T9S, R21E. Please refer to the Topo Map D. The pipeline will be constructed utilizing existing rights were possible and pulled into place using a rubber tired tractor. The pipeline will be butt-welded together.

Variances to Best Management Practices (BMPs) Requested:

Approximately 2600' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. **Location and Type of Water Supply:**

Please see the Natural Buttes SOP.

6. **Source of Construction Materials:**

Please see the Natural Buttes SOP.

7. **Methods of Handling Waste Materials:**

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E,Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E *(Request is in lieu of filing Form 3160-5, after initial production).*

8. **Ancillary Facilities:**

Please see the Natural Buttes SOP.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

Please see the Natural Buttes SOP.

upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for ***drilled*** seed are:

Crested Wheatgrass 12 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. **Surface/Mineral Ownership:**

The well pad and access road are located on lands owned by:

Ute Indian Tribe
P.O. Box 70
Fort Duchesne, Utah 84026
(435) 722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Stipulations/Notices/Mitigation:

There are no stipulations or notices for this location.

13. Other Information:

A Class III archaeological survey and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

14. Lessee's or Operator's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

9/4/2008
Date

Kerr-McGee Oil & Gas Onshore LP
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 2.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE EXISTING ACCESS TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 25' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.3 MILES.

API Well No: 43047501040000

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

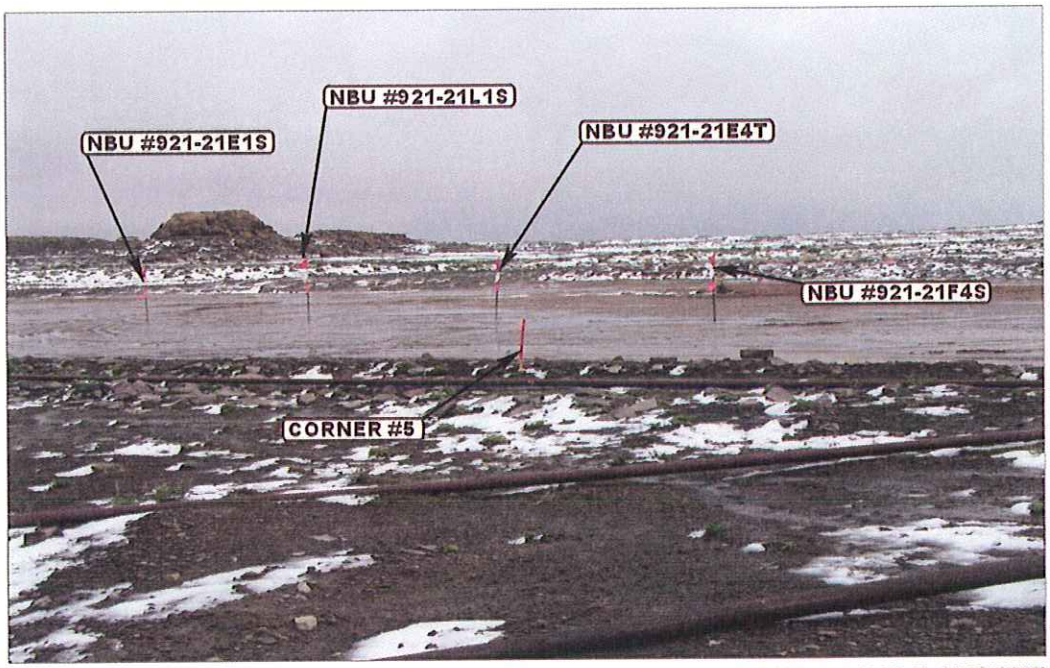


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHEASTERLY

PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHWESTERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	06 MONTH	30 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501040000

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

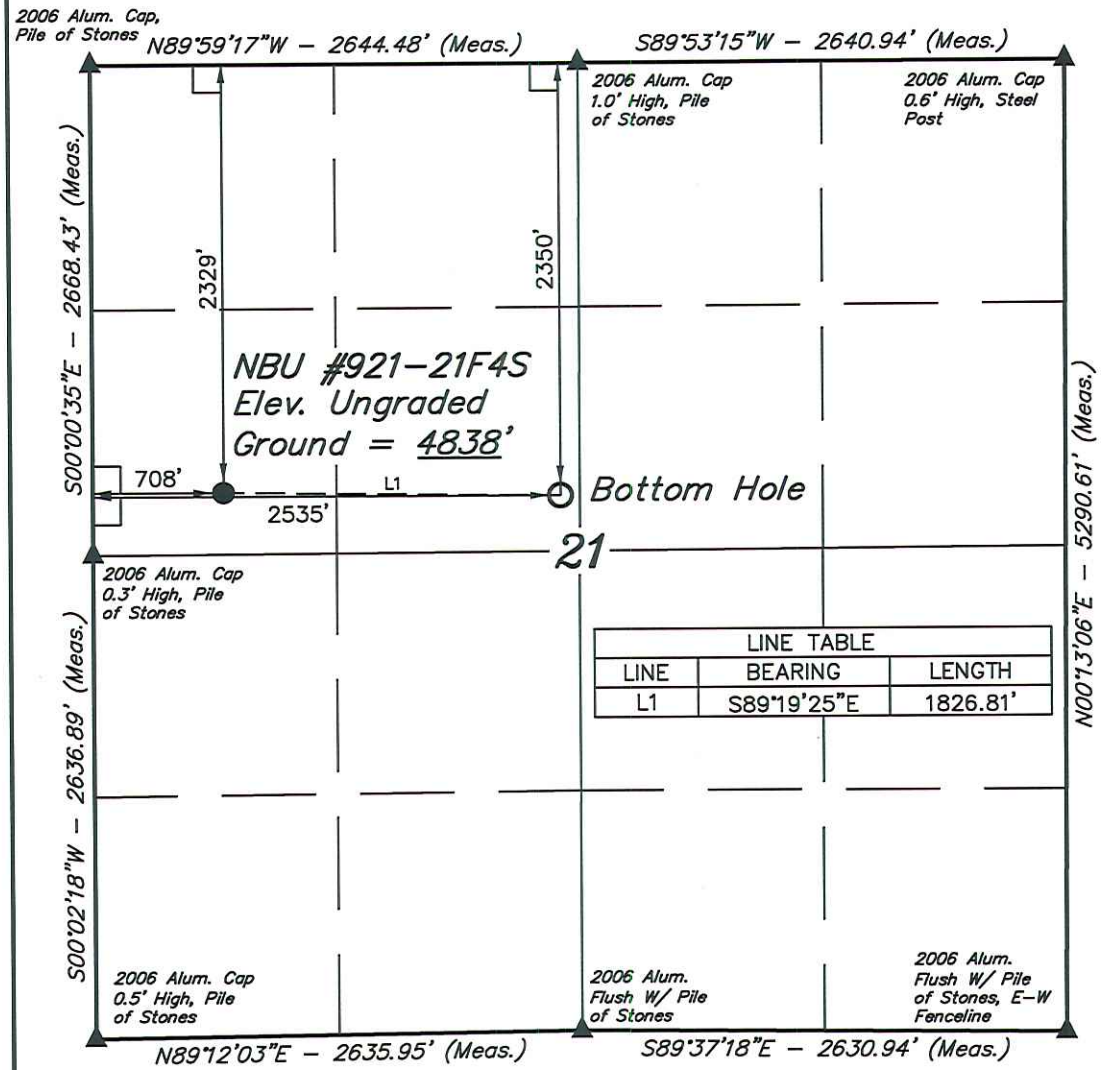
PHOTO: VIEW ALONG PIPELINE — CAMERA ANGLE: SOUTHERLY

PHOTO: VIEW OF TIE-IN AT 8" — CAMERA ANGLE: SOUTHERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	06 MONTH	30 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.J.	REVISED: 00-00-00		

T9S, R21E, S.L.B.&M.



LINE TABLE		
LINE	BEARING	LENGTH
L1	S89°19'25"E	1826.81'

Kerr–McGee Oil & Gas Onshore LP

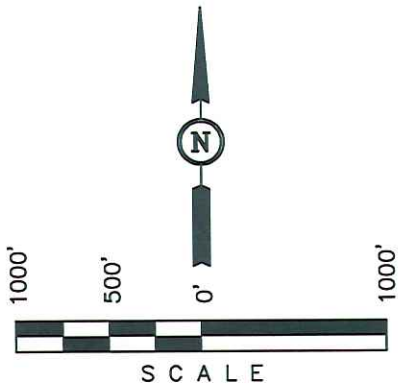
Well location, NBU #921–21F4S, located as shown in the SW 1/4 NW 1/4 of Section 21, T9S, R21E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH

LEGEND:

- └ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°01'20.59" (40.022386)	LATITUDE = 40°01'20.78" (40.022439)
LONGITUDE = 109°33'25.60" (109.557111)	LONGITUDE = 109°33'49.08" (109.563633)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 40°01'20.72" (40.022422)	LATITUDE = 40°01'20.91" (40.022475)
LONGITUDE = 109°33'23.12" (109.556422)	LONGITUDE = 109°33'46.60" (109.562944)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE: 1" = 1000'	DATE SURVEYED: 04–30–08	DATE DRAWN: 06–09–08
PARTY: D.K. C.K. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: Kerr–McGee Oil & Gas Onshore LP	

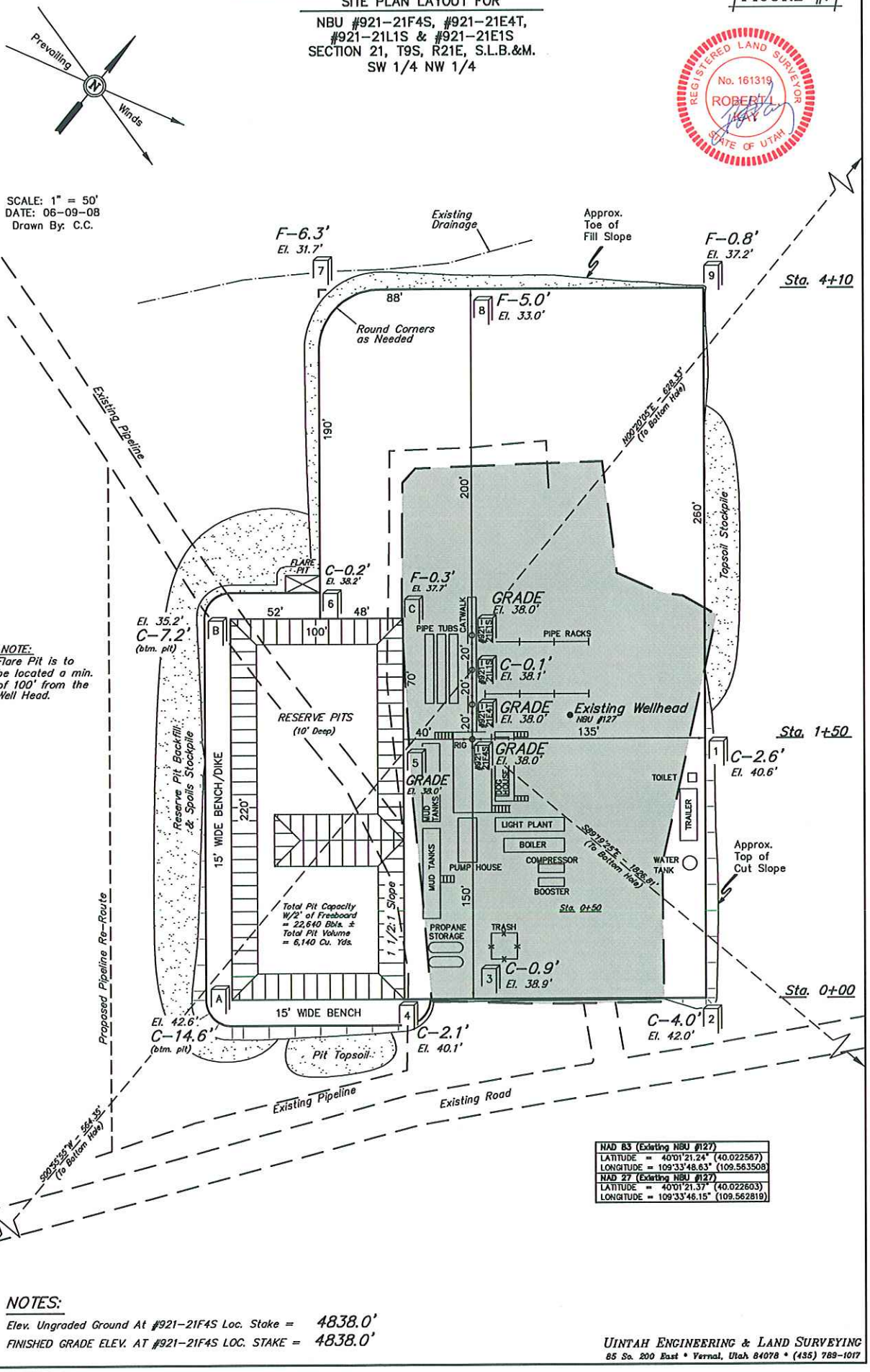
API Well No: 43047501040000

Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR
NBU #921-21F4S, #921-21E4T,
#921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

FIGURE #1

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L.
STATE OF UTAH



NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

NAD 83 (Existing NBU #127)
LATITUDE = 40°01'21.24" (40.022567)
LONGITUDE = 109°33'48.63" (109.563508)
NAD 27 (Existing NBU #127)
LATITUDE = 40°01'21.37" (40.022603)
LONGITUDE = 109°33'46.15" (109.562819)

NOTES:

Elev. Ungraded Ground At #921-21F4S Loc. Stake = 4838.0'
FINISHED GRADE ELEV. AT #921-21F4S LOC. STAKE = 4838.0'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

API Well No: 43047501040000

Kerr-McGee Oil & Gas Onshore LP

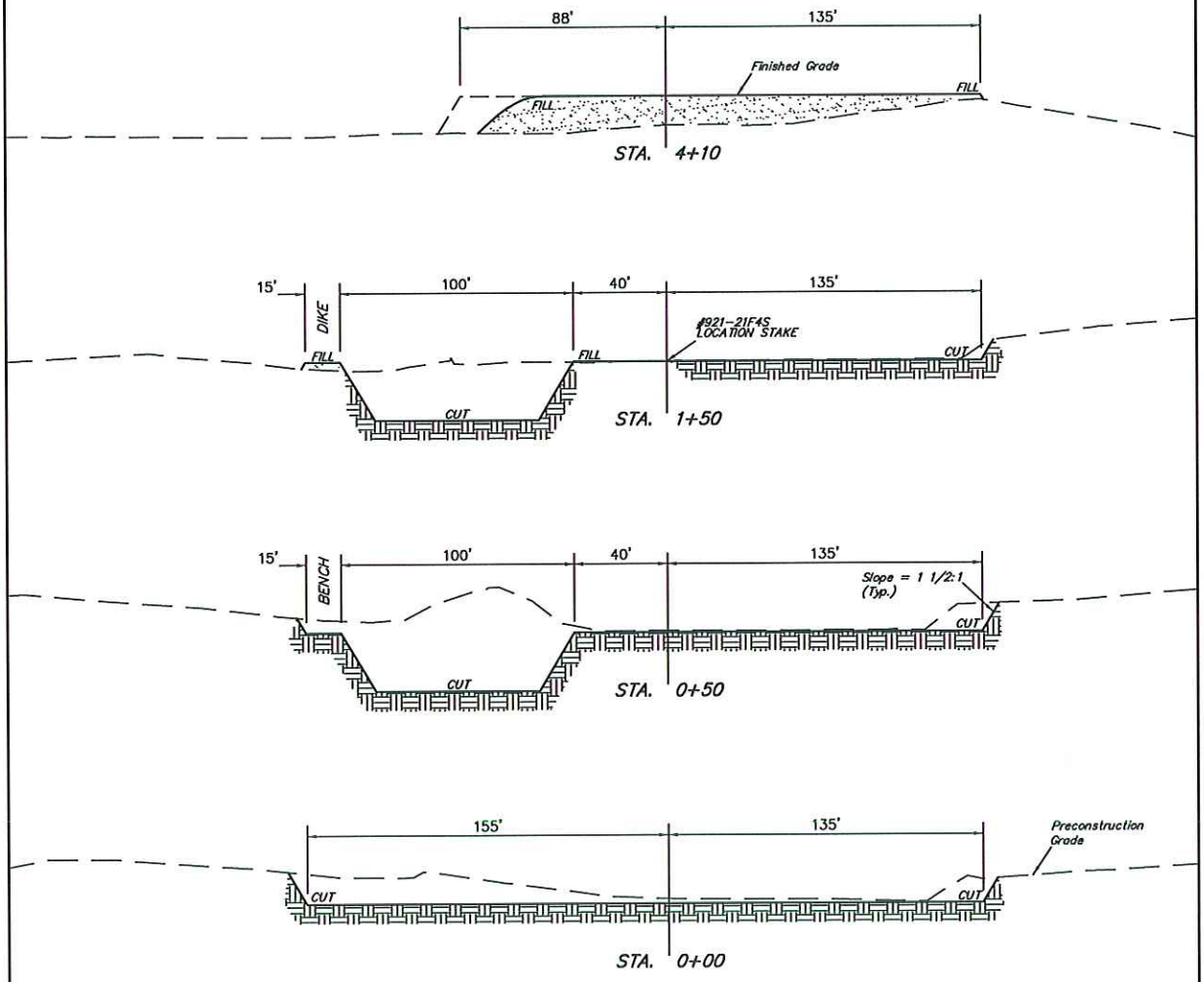
TYPICAL CROSS SECTIONS FOR
NBU #921-21F4S, #921-21E4T,
#921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

FIGURE #2

1" = 20'
X-Section Scale
1" = 50'

DATE: 06-09-08
Drawn By: C.C.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L.
STATE OF UTAH



* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

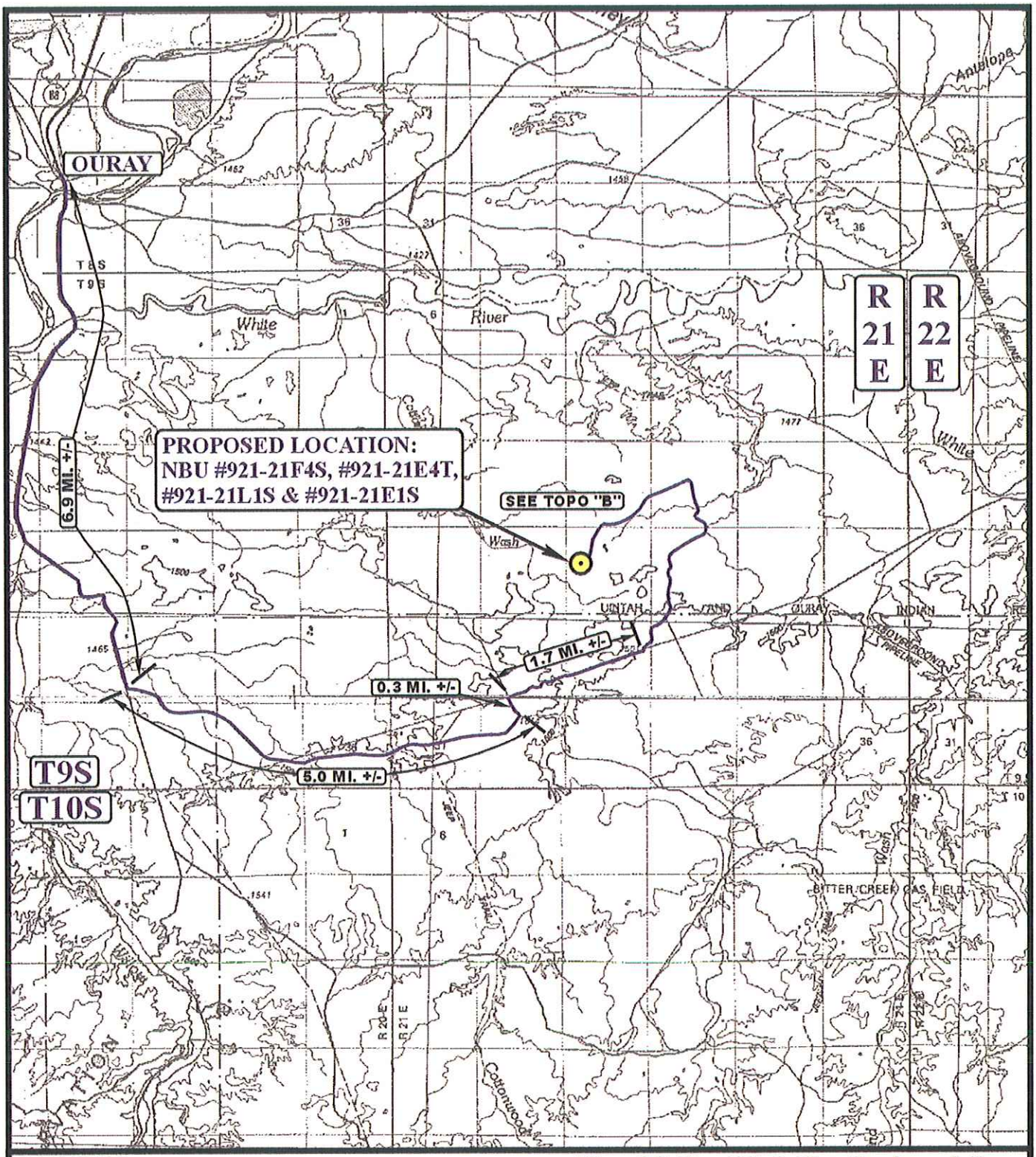
APPROXIMATE YARDAGES

CUT
(12") Topsoil Stripping = 2,370 Cu. Yds.
(New Construction Only)
Remaining Location = 7,770 Cu. Yds.

TOTAL CUT = 10,140 CU.YDS.
FILL = 5,830 CU.YDS.

EXCESS MATERIAL = 4,310 Cu. Yds.
Topsoil & Pit Backfill = 5,440 Cu. Yds.
(1/2 Pit Vol.)
DEFECIT UNBALANCE = <1,130> Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017



LEGEND:

PROPOSED LOCATION

N

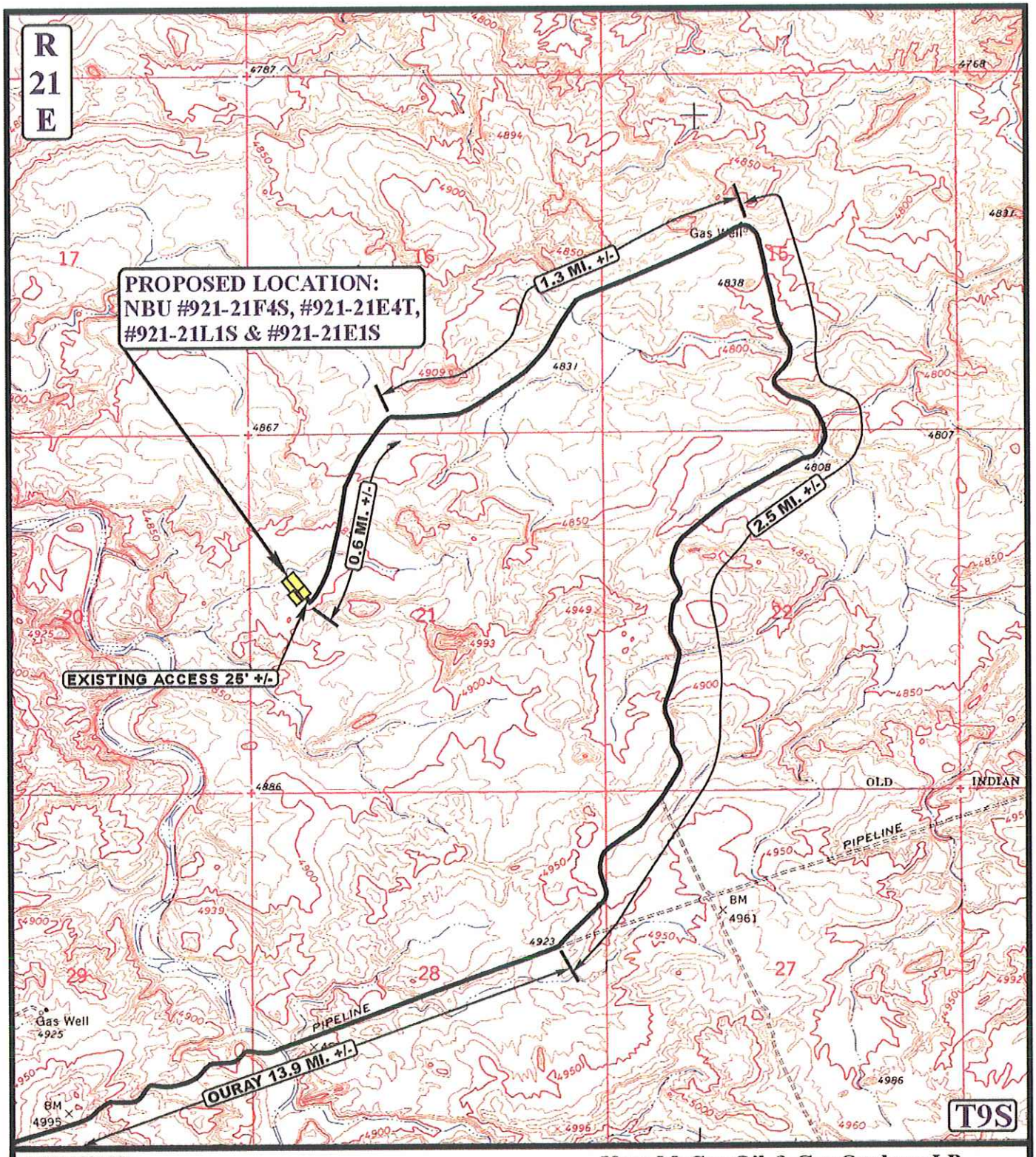
Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501040000



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

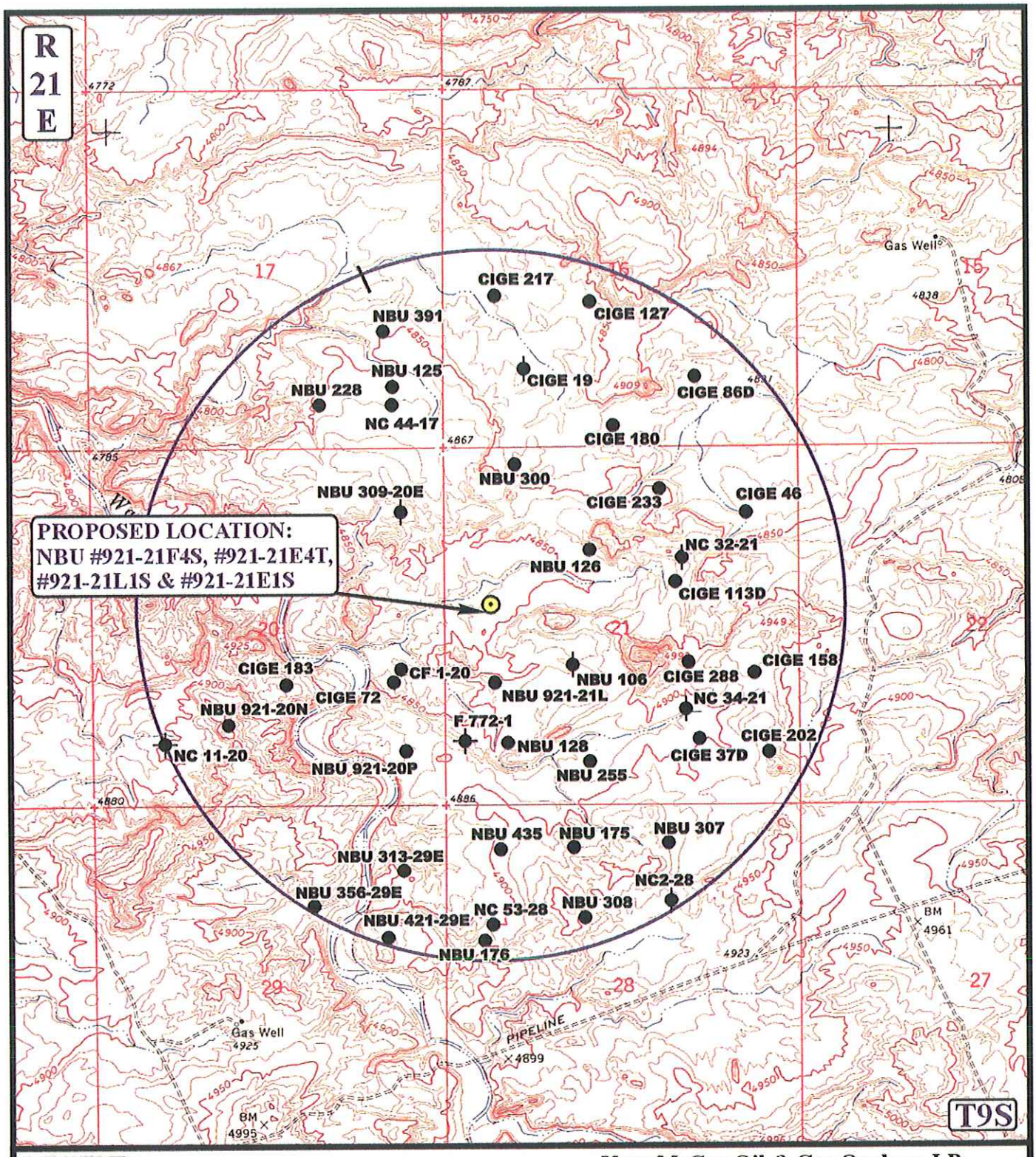
N

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 00-00-00		



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

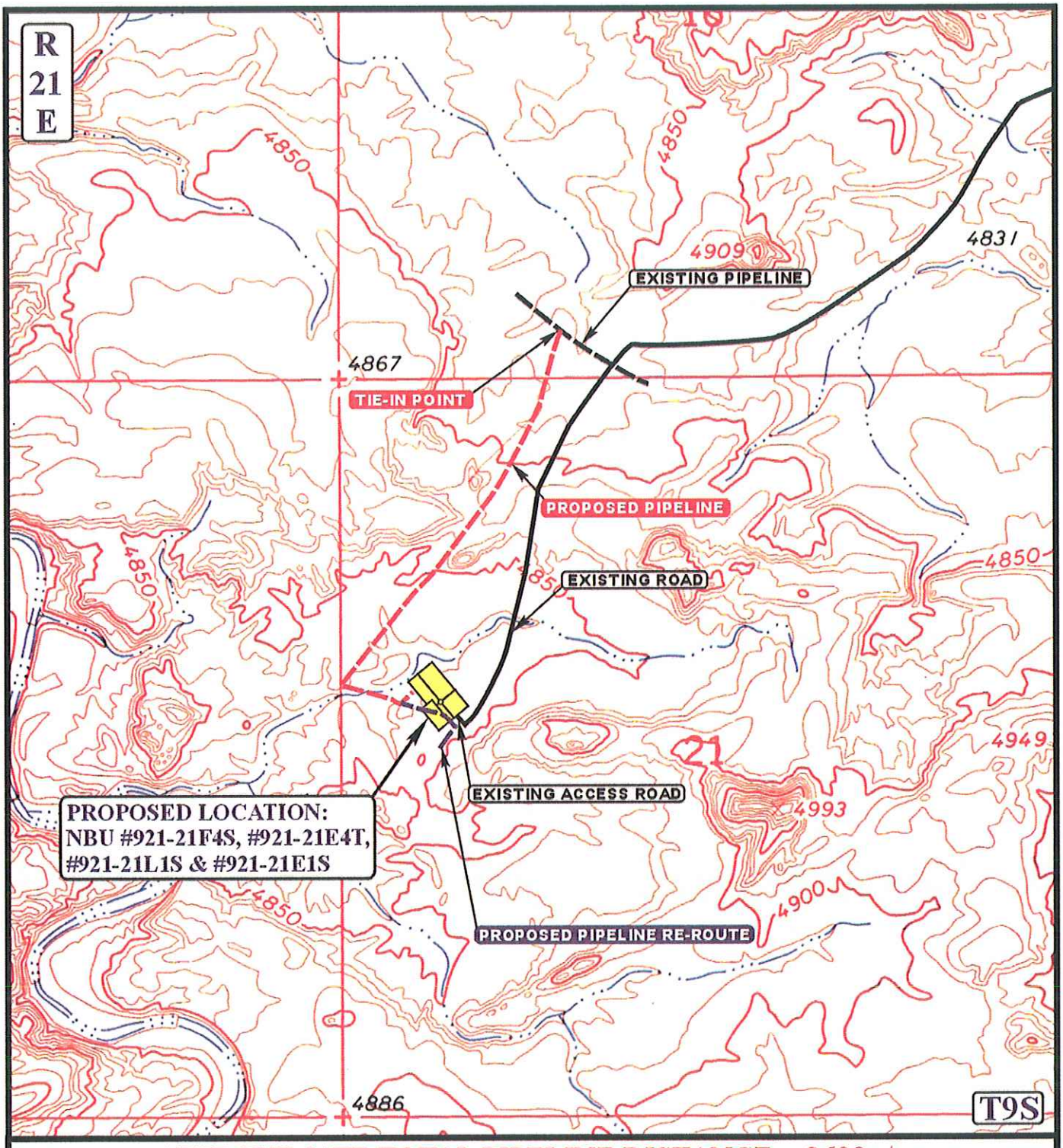
Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501040000



APPROXIMATE TOTAL PIPELINE DISTANCE = 2600+/-

LEGEND:

EXISTING ROAD
EXISTING PIPELINE
PROPOSED PIPELINE RE-ROUTE
PROPOSED PIPELINE

N

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501040000

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

September 9, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-50100	NBU 921-21E1S	Sec 21 T09S R21E 2282 FNL 0670 FWL BHL Sec 21 T09S R21E 1654 FNL 0674 FWL
43-047-50101	NBU 921-21L1S	Sec 21 T09S R21E 2298 FNL 0683 FWL BHL Sec 21 T09S R21E 2434 FSL 0674 FWL
43-047-50102	NBU 921-27J4S	Sec 27 T09S R21E 1390 FSL 1310 FEL BHL Sec 27 T09S R21E 1680 FSL 1410 FEL
43-047-50103	NBU 921-27J1S	Sec 27 T09S R21E 1387 FSL 1290 FEL BHL Sec 27 T09S R21E 2175 FSL 1410 FEL
43-047-50104	NBU 921-21F4S	Sec 21 T09S R21E 2329 FNL 0708 FWL BHL Sec 21 T09S R21E 2350 FNL 2535 FWL
43-047-50105	NBU 921-9E2S	Sec 08 T09S R21E 0966 FNL 0602 FEL BHL Sec 09 T09S R21E 1686 FNL 0110 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

API Well No: 43047501040000

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:9-9-08

API Well No: 43047501040000

Kerr-McGee Oil & Gas Onshore LP
1999 Broadway, Suite 3700
Denver, CO 80205

September 9, 2008

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 921-21F4S
T9S-R21E
Section 21: SWNW/SENW
Surface: 2329' FNL, 708' FWL
Bottom Hole: 2350' FNL, 2535' FWL
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 921-21F4S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

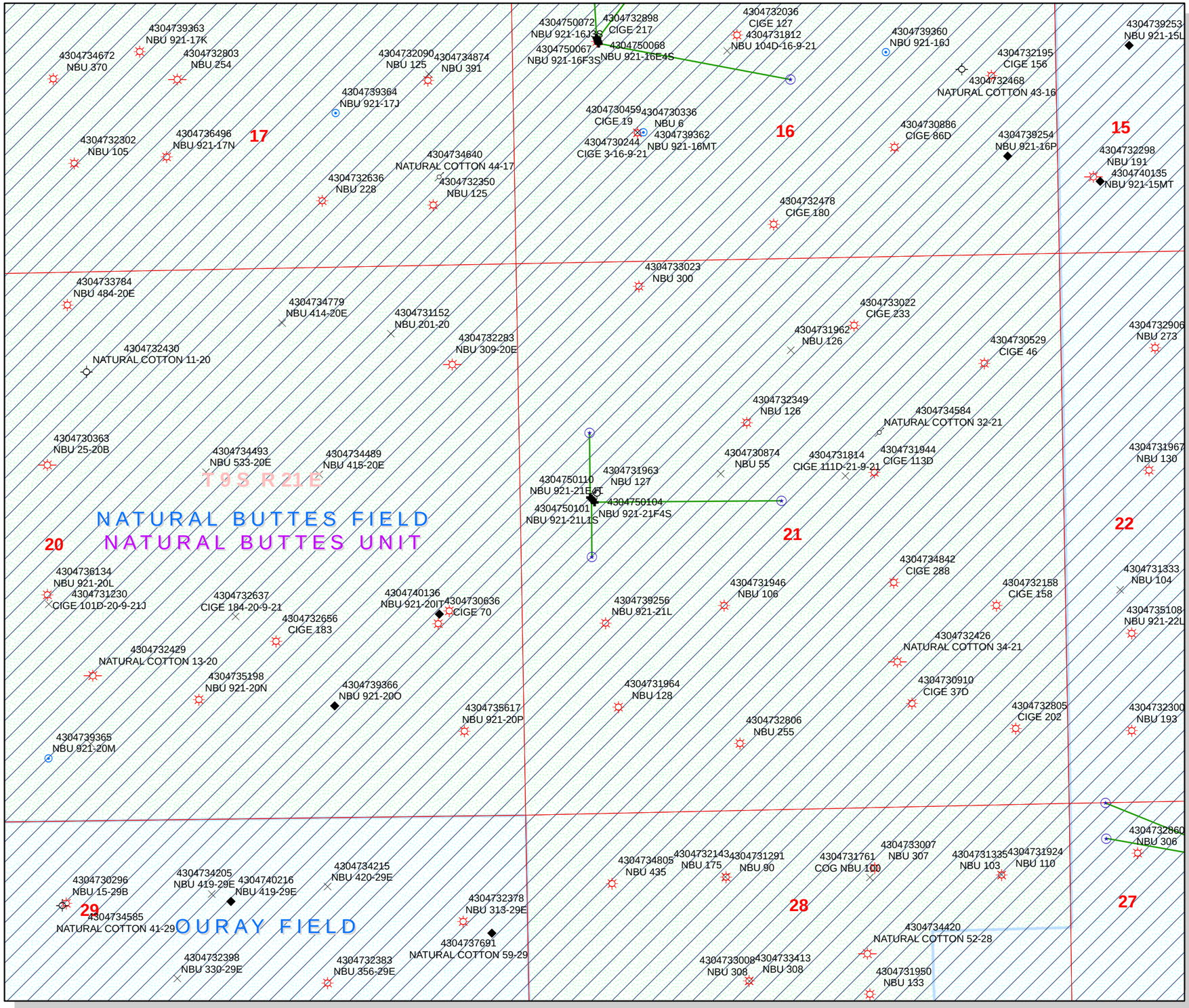
Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman

RECEIVED
SEP 10 2008
DIV. OF OIL, GAS & MINING



API Number: 4304750104

Well Name: NBU 921-21F4S

Township 09.0 S Range 21.0 E Section 21

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason

Units

STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS
- ACTIVE
- COMBINED
- Sections
- Township

Wells Query Events
- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS
- Bottom Hole Location

1,300 650 0 1,300 Feet

1:12,000

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/8/2008 **API NO. ASSIGNED:** 43047501040000

WELL NAME: NBU 921-21F4S

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6226

CONTACT: Kevin McIntyre

PROPOSED LOCATION: SWNW 21 090S 210E **Permit Tech Review:** ☑

SURFACE: 2329 FNL 0708 FWL **Engineering Review:** ☐

BOTTOM: 2350 FNL 2535 FWL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 40.02239 **LONGITUDE:** -109.56293

UTM SURF EASTINGS: 622634.00 **NORTHINGS:** 4431022.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0576 **PROPOSED FORMATION:** WSMVD

SURFACE OWNER: 2 - Indian **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

LOCATION AND SITING:

- ☐ **R649-2-3.**

  Unit: NATURAL BUTTES
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

  Board Cause No: 173-14

  Effective Date: 12/2/1999

  Siting: 460' fr u bdry & uncomm. tract
- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 4 - Federal Approval - bhill
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: NBU 921-21F4S
API Well Number: 43047501040000
Lease Number: UTU-0576
Surface Owner: INDIAN
Approval Date: 9/17/2008

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P. , P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of CAUSE: 173-14.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

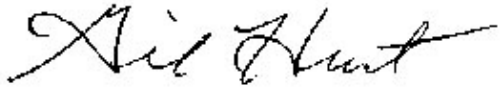
Notification Requirements:
Notify the Division with 24 hours of spudding the well.
- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.
- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

API Well No: 43047501040000

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:



Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047501040000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/14/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 14, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/10/2009

RECEIVED September 10, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501040000

API: 43047501040000
Well Name: NBU 921-21F4S
Location: 2329 FNL 0708 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/18/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/10/2009
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: September 14, 2009

By: 

RECEIVED September 10, 2009

API Well No: 43047501040000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/20/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SPUD REPORT Date of Spud:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ DRILLING REPORT Report Date:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 28, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE		**DATE**
N/A		9/20/2010

RECEIVED September 20, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501040000

API: 43047501040000
Well Name: NBU 921-21F4S
Location: 2329 FNL 0708 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/18/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/20/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: September 28, 2010

By: 

RECEIVED September 20, 2010

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/22/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 08/22/2011

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 8/22/2011

RECEIVED Aug. 22, 2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501040000

API: 43047501040000
Well Name: NBU 921-21F4S
Location: 2329 FNL 0708 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/18/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Andy Lytle **Date:** 8/22/2011
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED Aug. 22, 2011

Form 3160-3
(August 2007)

RECEIVED

FEB 17 2011

BLM

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. UTU0576
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No. UTU63047A
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone	8. Lease Name and Well No. NBU 921-21F4S
2. Name of Operator KERRMCGEE OIL&GAS ONSHORE LP Contact: DANIELLE E PIERNOT Mail: Danielle.Piernot@anadarko.com	9. API Well No. 43-047-50104
3a. Address PO BOX 173779 DENVER, CO 80202-3779 / 3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156	10. Field and Pool, or Exploratory NATURAL BUTTES
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW 2329FNL 708FWL 40.02244 N Lat, 109.56363 W Lon At proposed prod. zone SENW 2350FNL 2535FWL 40.02239 N Lat, 109.55711 W Lon	11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T9S R21E Mer SLB
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 14 MILES SOUTHEAST OF OURAY, UTAH	12. County or Parish UINTAH / 13. State UT
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2350 FEET / 16. No. of Acres in Lease 1480.00	17. Spacing Unit dedicated to this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 1850 FEET / 19. Proposed Depth 10544 MD 10100 TVD	20. BLM/BIA Bond No. on file WYB000291
21. Elevations (Show whether DF, KB, RT, GL, etc. 4838 GL / 22. Approximate date work will start 06/01/2011	23. Estimated duration 60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE E PIERNOT Ph: 720-929-6156	Date 02/17/2011
Title REGULATORY ANALYST I		
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	Date OCT 04 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
OCT 12 2011
DIV. OF OIL, GAS & MINING

Additional Operator Remarks (see next page)

Electronic Submission #102784 verified by the BLM Well Information System
For KERRMCGEE OIL&GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 02/23/2011 ()

UDOGM

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

11RRH1262AE

NO NOS

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore LP**	**Location:**	**SWNW, Sec. 21, T9S R21E**
Well No:	**NBU 921-21E4ST**	**Lease No:**	**UTU-0576**
API No:	**43-047-50110**	**Agreement:**	**Natural Buttes**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

- Paint all facilities "Shadow Gray."

- Monitor by a permitted paleontologist during construction operations.

- Construct diversion drainages around the west side of the well pad.

- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002, a raptor survey should be conducted prior to construction of the proposed location, pipeline, or access road if construction would take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines.

- If project construction operations are not initiated before June 17, 2010, KMG should conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding all disturbed areas.

- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.

- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.

- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.

- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.

- Major low water crossings will be armored with pit run material to protect them from erosion.

- All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.

- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.

- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

- If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are identified during a new survey, KMG should conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).

- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).

- All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Form 3160-3
(August 2007)

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT FEB 17 2011

BLM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. UTU0576
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No. UTU63047A
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone	8. Lease Name and Well No. NBU 921-21F4S
2. Name of Operator KERRMCGEE OIL&GAS ONSHORE LP Contact: DANIELLE E PIERNOT E-Mail: Danielle.Piernot@anadarko.com	9. API Well No. 43-047-50104
3a. Address PO BOX 173779 DENVER, CO 80202-3779 / 3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156	10. Field and Pool, or Exploratory NATURAL BUTTES
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW 2329FNL 708FWL 40.02244 N Lat, 109.56363 W Lon At proposed prod. zone SENW 2350FNL 2535FWL 40.02239 N Lat, 109.55711 W Lon	11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T9S R21E Mer SLB
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 14 MILES SOUTHEAST OF OURAY, UTAH	12. County or Parish UINTAH / 13. State UT
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2350 FEET / 16. No. of Acres in Lease 1480.00	17. Spacing Unit dedicated to this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 1850 FEET / 19. Proposed Depth 10544 MD 10100 TVD	20. BLM/BIA Bond No. on file WYB000291
21. Elevations (Show whether DF, KB, RT, GL, etc. 4838 GL / 22. Approximate date work will start 06/01/2011	23. Estimated duration 60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE E PIERNOT Ph: 720-929-6156	Date 02/17/2011
Title REGULATORY ANALYST I		
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	Date OCT 04 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
OCT 12 2011
DIV. OF OIL, GAS & MINING

Additional Operator Remarks (see next page)

Electronic Submission #102784 verified by the BLM Well Information System
For KERRMCGEE OIL&GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 02/23/2011 ()

RECEIVED
OCT 28 2011

UDOGM

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

11RRH1262AE NO NOS

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore LP**	**Location:**	**SWNW, Sec. 21, T9S R21E**
Well No:	**NBU 921-21F4S**	**Lease No:**	**UTU-0576**
API No:	**43-047-50104**	**Agreement:**	**Natural Buttes**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- Paint all facilities "Shadow Gray."
- Monitor by a permitted paleontologist during construction operations.
- Construct diversion drainages around the west side of the well pad.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002, a raptor survey should be conducted prior to construction of the proposed location, pipeline, or access road if construction would take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines.
- If project construction operations are not initiated before June 17, 2010, KMG should conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.

- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.

- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

- If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are identified during a new survey, KMG should conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).

- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).

- All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☑ SPUD REPORT Date of Spud: 2/27/2012	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 02/27/2012 AT 0900 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 02, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst
SIGNATURE		**DATE**
N/A		3/1/2012

RECEIVED: Mar. 01, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6515

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 3/7/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU AIR RIG ON MARCH 5, 2012. DRILLED SURFACE HOLE TO 3,030'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 14, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 3/8/2012

RECEIVED: Mar. 08, 2012

Sundry Number: 24007 API Well Number: 43047501040000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-0576

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Ute

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 921-21F4S

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047501040000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6515

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/19/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests approval to deepen the well to the Blackhawk formation (part of the Mesaverde Group). The Operator also requests approval for a FIT waiver, a closed loop drilling option, a surface casing change and a production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: March 26, 2012

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE		**DATE**
N/A		3/19/2012

RECEIVED: Mar. 19, 2012

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 921-21F4S

Surface: 2329 FNL / 708 FWL SWNW
BHL: 2350 FNL / 2535 FWL SENW

Section 21 T9S R21E

Unitah County, Utah
Mineral Lease: UTU-0576

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 - Surface	
Green River	1,603'	
Birds Nest	1,942'	Water
Mahogany	2,400'	Water
Wasatch	4,957'	Gas
Mesaverde	7,907'	Gas
Sego	10,150'	Gas
Castlegate	10,229'	Gas
Blackhawk	10,626'	Gas
TVD	11,226'	
TD	11,589'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

RECEIVED: Mar. 19, 2012

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 11226' TVD, approximately equals 7,409 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,991 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

RECEIVED: Mar. 19, 2012

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

RECEIVED: Mar. 19, 2012

KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	March 16, 2012		
WELL NAME	**NBU 921-21F4S**			TD	11,226'	TVD	11,589' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,838'
SURFACE LOCATION	SWNW	2329 FNL	708 FWL	Sec 21	T 9S	R 21E	
	Latitude:	40.022439	Longitude:	-109.563633		NAD 83	
BTM HOLE LOCATION	SENW	2350 FNL	2535 FWL	Sec 21	T 9S	R 21E	
	Latitude:	40.022386	Longitude:	-109.557111		NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BIA (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4	8-5/8", 28#, IJ-55, LTC	Air mist
		200'			
All water flows encountered while drilling will be reported to the appropriate agencies.					
			11.00'	8-5/8", 28#, IJ-55, LTC	Air mist
	Green River @	1,603'			
	Top of Birds Nest @	1,942'			
	Mahogany @	2,400'			
	Preset f/ GL @	2,850' TVD			
	Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.				
	Wasatch @	4,957'			
Mud logging program TBD Cased hole logging program from TD - surf csg			7-7/8"	4-1/2" 11.6# HCP-110 Ultra DQX/LTC csg	Water / Fresh Water Mud 8.3-13.0 ppg
	Mesaverde @	7,907' TVD			
	Sego @	10,150' TVD			
	Castlegate @	10,229' TVD			
	Blackhawk @	10,626' TVD			
Max anticipated Mud required 13.0 ppg	TD @	11,226' TVD 11,589' MD			

NBU 921-21F4S

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION LTC	TENSION DQX
CONDUCTOR	14"	0-40'									
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,850	28.00	IJ-55	LTC	1.89	1.41	4.98	N/A
								10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.14		3.41
	4-1/2"	5,000	to	11,589'	11.60	HCP-110	LTC	1.19	1.14	4.56	

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE		**NOTE: If well will circulate water to surface, option 2 will be utilized**						
Option 2	LEAD	2,350'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	4,449'	Premium Lite II +0.25 pps	350	35%	12.00		3.38
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	7,140'	50/50 Poz/G + 10% salt + 2% gel	1,680	35%	14.30		1.31
			+ 0.1% R-3					

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

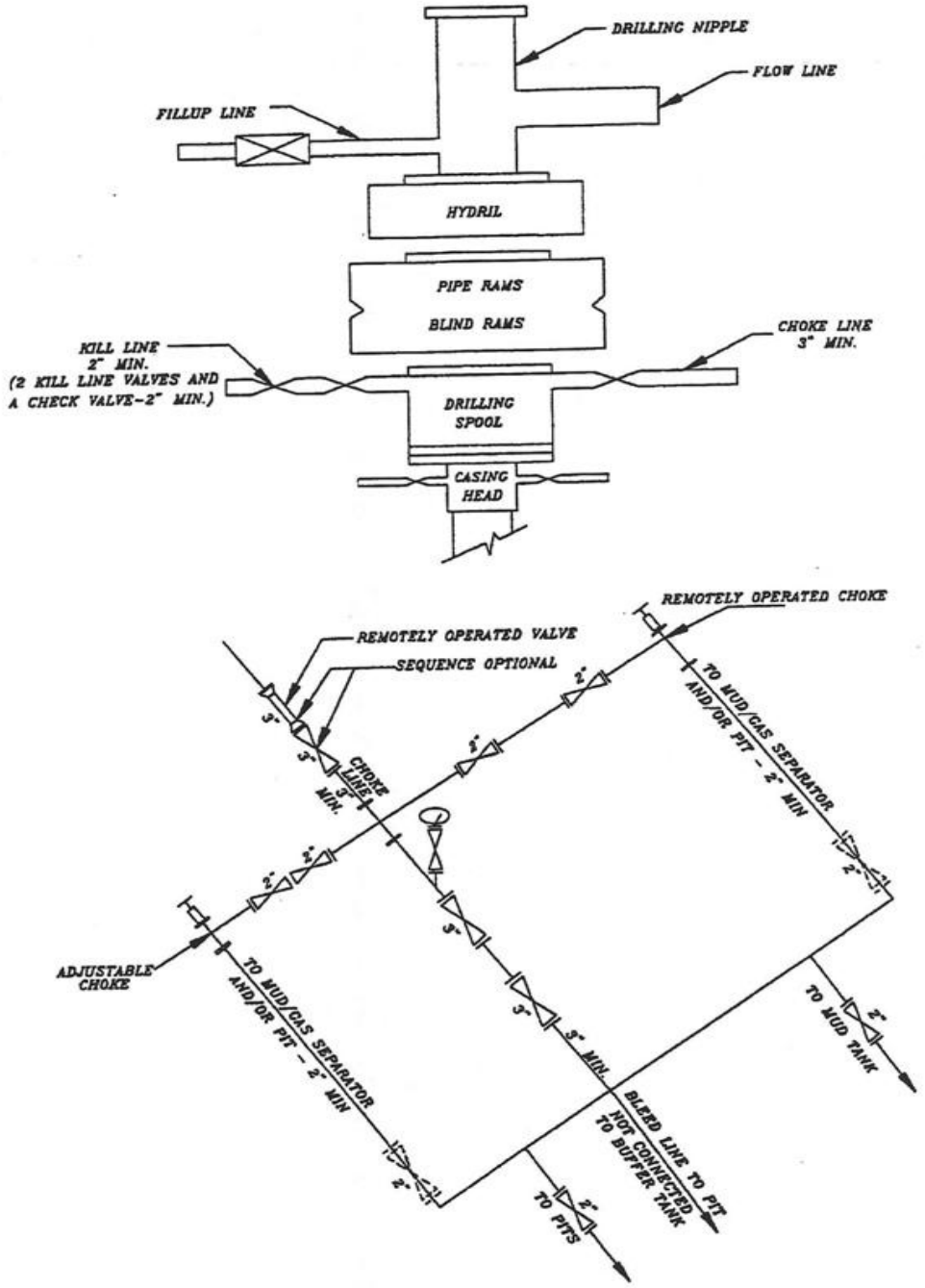
Nick Spence / Danny Showers / Chad Loesel

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Kenny Gathings / Lovel Young

RECEIVED: Mar. 19, 2012

EXHIBIT A
NBU 921-21F4S



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

RECEIVED: Mar. 19, 2012

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

RECEIVED: Mar. 19, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

C

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750104	NBU 921-21F4S		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD
SPUD WELL ON 02/27/2012 AT 0900 HRS.

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750110	NBU 921-21E4T		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG.
SPUD WELL ON 02/27/2012 AT 1200 HRS.
WSMVD

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750101	NBU 921-21L1S		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG.
SPUD WELL ON 02/27/2012 AT 1500 HRS. BHL NWSW
WSMVD

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA WOPSOCK
Name (Please Print)

Signature

REGULATORY ANALYST
Title

3/1/2012
Date

RECEIVED
MAR 01 2012
Div. of Oil, Gas & Mining

(5/2000)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 5/6/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU ROTARY RIG. FINISHED DRILLING FROM 3047' TO 11574' ON 5/4/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P 298 RIG ON 5/6/2012 @ 11:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
May 09, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 5/9/2012

RECEIVED: May. 09, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6515

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☑ DRILLING REPORT Report Date: 7/6/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No activity for the month of June 2012. Well TD at 11,574'.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 10, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 7/6/2012

RECEIVED: Jul. 06, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21F4S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501040000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2329 FNL 0708 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 7/23/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 7/23/2012. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 25, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 7/24/2012

RECEIVED: Jul. 24, 2012

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU0576

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU63047A

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP — Contact: CARA MAHLER — E-Mail: cara.mahler@anadarko.com

8. Lease Name and Well No. NBU 921-21F4S

3. Address 1099 18TH STREET, SUITE 1800 DENVER, CO 80202

3a. Phone No. (include area code) Ph: 720-929-6029

9. API Well No. 43-047-50104

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface SWNW 2329FNL 708 FWL

At top prod interval reported below SENW 2335FNL 2529FWL

At total depth SENW 2411FNL 2546FWL BHL by HSM

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 21 T9S R21E Mer SLB

12. County or Parish UINTAH

13. State UT

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, KB, RT, GL)*
02/27/2012	05/04/2012	☐ D & A ☒ Ready to Prod. 07/23/2012	4838 GL

18. Total Depth:	MD 11574 TVD 11235	19. Plug Back T.D.:	MD 11536 TVD 11198	20. Depth Bridge Plug Set:	MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CB/GR/CCL/TEMP

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	3024		565		0	
7.875	4.500 P-110	11.6	0	11559		1876		1990	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	10984							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	MESAVERDE	8286	11359	8286 TO 11359	0.360	216	OPEN
B)							
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8286 TO 11359	PUMP 14, 292 BBLS SLICK H2O & 315,598 LBS 30/50 OTTAWA SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/23/2012	07/28/2012	24	→	0.0	2900.0	0.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	2025 SI	2864.0	→	0	2900	0		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #148163 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

RECEIVED
SEP 05 2012
DIV. OF OIL, GAS & MINING

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER	1710
				BIRD'S NEST	2051
				MAHOGANY	2552
				WASATCH	5295
				MESAVERDE	8270

32. Additional remarks (include plugging procedure):
The first 210 ft of the surface hole was drilled with a 12 1/4 in. bit. The remainder of the surface hole was drilled with an 11 in bit. DQX csg was run from surface to 5,039 ft; LTC csg was run from 5,039 ft to 11,561 ft. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #148163 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal

Name *(please print)* CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 08/30/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012	End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/5/2012	9:00 - 15:00	6.00	MIRU	01	B	P		MIRU /// HOWCROFT - 7 TRUCKS /// MOUNTAIN WEST 3 MEN /// CAPSTAR 5 MEN & 1 FORKLIFT /// RELEASE TRUCKS @ 15:00
	15:00 - 16:30	1.50	MIRU	08	A	Z		WELD CABLE GUARDS ON TONG LINE SHEAVE IN DERRICK (DERRICK IN AIR @ 16:30)
	16:30 - 18:00	1.50	PRPSPD	14	A	P		WELD ON CONDUCTOR & RIG UP FLOW LINE
	18:00 - 18:30	0.50	PRPSPD	07	A	P		SERVICE RIG & EQUIPMENT
	18:30 - 19:00	0.50	PRPSPD	08	A	Z		REPLACE TONG LINE IN DERRICK
	19:00 - 20:00	1.00	PRPSPD	06	A	P		PU 12.25" BIT & 8" MUD MOTOR & TIH
	20:00 - 21:30	1.50	DRLSUR	02	B	P		DRILL 12.25" SURFACE HOLE F/ 40'-165'
	21:30 - 22:00	0.50	DRLSUR	08	A	Z		REPAIR BROKE LIGHT IN DERRICK
	22:00 - 22:30	0.50	DRLSUR	06	A	P		TOOH & LAY DOWN 12.25" BIT
	22:30 - 0:00	1.50	DRLSUR	06	A	P		PU 11" BIT & DIR. TOOLS, SCRIBE & TIH
3/6/2012	0:00 - 15:30	15.50	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 165'- 2049' ROP= 1884' @ 121 FPH WOB= 24-28K RPM= 55/105 SPP= 1350/1000 GPM= 595 TRQ= 2800/1900 NO LOSSES
	15:30 - 16:00	0.50	DRLSUR	07	A	P		SERVICE RIG & EQUIPMENT
	16:00 - 0:00	8.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 2049'-2594' ROP= 545' @ 68 FPH WOB= 24-28K RPM= 55/105 SPP= 1350/1050 GPM= 595 TRQ= 2950/1800 NO LOSSES
3/7/2012	0:00 - 6:00	6.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 2594'- 3030 ROP= 436' @ 73 FPH WOB= 24-28K RPM= 55/105 SPP= 1350/1050 GPM= 595 TRQ= 2950/1800 NO LOSSES FINAL SURVEY @ 2964'= 22.53 DEG & 87.83 AZ 6' HIGH & 1' RIGHT OF LINE ROTATE 72.9% /// SLIDE 27.1%
	6:00 - 6:30	0.50	DRLSUR	05	A	P		CIRC & COND. HOLE FOR 8-5/8" CSG
	6:30 - 10:00	3.50	DRLSUR	06	A	P		LAY DOWN DRILL STRING & DIR. TOOLS
	10:00 - 12:00	2.00	CSG	12	C	P		PJSM /// RUN 68 JT'S OF 8-5/8", 28#, J-55, LT&C CSG /// SHOE SET @ 3006' & BAFFLE @ 2960'
	12:00 - 12:30	0.50	CSG	05	A	P		CIRC 8.625" SURFACE CSG @ 3006'

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:30 - 13:30	1.00	CSG	12	E	P		PJSM WITH PRO PETRO CMT CREW /// TEST LINES TO 2000 PSI /// PUMP 40 BBL'S WATER FOLLOWED BY 20 BBL'S GEL WATER PRE FLUSH /// LEAD = 240 SX CLASS G CMT @ 11.0 WT & 3.82 YIELD /// TAIL = 200 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// DROP PLUG & DISPLACE W/ 184 BBL'S WATER /// PLUG DN @ 13:12 03/07/2012 /// BUMP PLUG W/ 1000 PSI /// FINAL LIFT= 680 PSI /// CHECK FLOATS- HELD W/ .5 BBL'S BACK /// FULL CIRC. THRU OUT JOB /// 34 BBL'S CMT TO SURFACE
	13:30 - 14:00	0.50	CSG	14	A	P		CUT OFF CONDUCTOR & HANG OFF 8.625" SURFACE CSG
	14:00 - 15:00	1.00	CSG	12	E	P		PUMPTOP OUT W/ 125 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// CMT STAYED @ SURFACE /// RELEASE RIG @ 15:00 03/07/2012 TO THE NBU 921-21E4T
4/22/2012	12:00 - 21:30	9.50	RDMO	01	E	P		SKID RIG BACK TO MUD BOAT & PIN RD POWER CORDS STROKE DERRICK RAMS & PIN / RIG DOWN,PREP RIG FOR TRUCKS MOVE DRILL PIPE TO NEW LOCATION NBU 921-21E PAD (18 MILE MOVE) FOR CAT 3 INSPECTION ,MOVE UPRIGHT TANKS AND TRANSFER MUD ,JONES 4 TRUCKS 1 FORKLIFT, 7 MEN, H&P 14 MEN EXTRA LABOR 4 MEN, 15 .5 HRS / SFTN
	21:30 - 0:00	2.50	RDMO	21	C	P		WAIT ON DAY LIGHT TO CONTINUE RIG DOWN & MOVE
4/23/2012	0:00 - 6:00	6.00	MIRU	21	A	P		WAIT ON DAYLIGHT
	6:00 - 19:30	13.50	MIRU	01	A	P		HSM, WITH H&P CREWS,12 MEN ,RW JONES TRUCKING,22 MEN J&C CRANE,5 MEN,RD MOVE RIG W/ 7 BED TRUCKS,9 HAUL TRUCKS / 2 FORKLIFTS, 1 CRANE. ,MOUNTAIN WEST 3 TRUCKS 6 MEN ,MOVE AND SET CAMPS HAUL FUEL TANK, ,GENS ,MCC HOUSE ,PUMPS WATER TANK,OIL LUBSTER, 6 CONEX HOUSES/ ,BOP HANDLER,1 LOAD SKID RAILS, MUD TANKS ,SHAKERS, CHOKE HOUSE ,FLOW LINES,/ NOV & SWACO EQUIP LOWER DERRICK @ 13:30 HRS,SPLIT & LOAD OUT/ LOWER DOG HOUSE / BLEED SUB CYLINDERS,LOWER SUB & LOAD OUT / RIG 95% MOVED, W/ BACK YARD SET IN PLACE & RIGGED UP,RIG 40% RIGGED UP RELEASED 4 HAUL TRUCKS 3 BED TRUCKS / SFTN / MAN HRS =189, ERTRA LABOR H&P 2 MEN 13.5 HRS / 10 MEN 1.5 HRS
	19:30 - 0:00	4.50	MIRU	21	C	P		WAIT ON DAYLIGHT
4/24/2012	0:00 - 6:00	6.00	MIRU	21	C	P		WAIT ON DAYLIGHT
	6:00 - 22:00	16.00	MIRU	01	B	P		CONTINUE TO MIRU ,SET SKID RAILS SET & RAISE SUB SET IN PLACE & REASSEMBLE DERRICK,STROKE DERRICK CYLINDERS,H&P PREFORMING YEARLY STRUCTURAL INSPECTION ON SUB & DERRICK 2 HRS WELDING ON DERRICK / RAISE TO RIG FLOOR & PIN / DERRICK UP @ 20:00 / RIG IUP ROTARY TOOLS / RELEASE CRANE /@19:30/ 2JONES TRUCK LEFT TO FINISH RIG UP/ H&P 12 MEN

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	22:00 - 0:00	2.00	MIRU	02				RIG IDLE,, H&P RAN OUT OF MAN HOURS
4/25/2012	0:00 - 3:00	3.00	MIRU	21	E	P		RIG IDLE H&P OUT OF MAN HRS.
	3:00 - 18:00	15.00	MIRU	01	B	P		RIG UP ROTARY TOOLS / JONES TRUCKING 1 TRUCK - 1 FORK LIFT - 4 MEN / HP 11 MEN 13.8 RIG MOVE MILES / 78 HRS
	18:00 - 23:00	5.00	PRPSPD	14	A	P		NIPPLE UP BOP & EQUIPMENT
	23:00 - 0:00	1.00	PRPSPD	14	A	P		NIPPLE UP MI SWACO PRESSURE CONTROL EQUIPMENT
4/26/2012	0:00 - 5:00	5.00	PRPSPD	14	A	P		NIPPLE UP MI SWACO PRESSURE CONTROL EQUIPMENT
	5:00 - 6:00	1.00	PRPSPD	01	B	P		INSTALL DRILLING BAILS
	6:00 - 7:00	1.00	PRPSPD	14	B	P		PULL BEARING ASSY ON ROTATING HEAD
	7:00 - 11:30	4.50	PRPSPD	15	A	P		SAFETY MEETING / TEST BOP'S & EQUIPMENT AS PER PROGRAM 250 LOW 5000 HIGH 250/2500 ON ANNULAR
	11:30 - 14:00	2.50	PRPSPD	15	A	P		TEST MI SWACO PRESSURE CONTROL EQUIPMENT / SEVERAL TIMES DUE TO LEAKING CONNECTIONS
	14:00 - 14:30	0.50	PRPSPD	14	A	P		INSTALL ROTATING HEAD OILER ASSY
	14:30 - 15:00	0.50	PRPSPD	23		P		CHECK OFF PRE SPUD SAFETY CHECK LIST
	15:00 - 15:30	0.50	PRPSPD	14	B	P		INSTALL WEAR BUSHING
	15:30 - 21:00	5.50	PRPSPD	06	A	P		PICK UP & MAKE UP BHA # 1 WITH WEATHERFORD SCRIBE / OREINTATE & TEST SAME / TIH PICKING UP DRILL PIPE TO 2,907' TAG CEMENT / RACK BACK 5 STDS
	21:00 - 21:30	0.50	PRPSPD	07	B	P		LEVEL DRK & INSTALL ROTATING HEAD
	21:30 - 22:00	0.50	PRPSPD	23		P		PRE SPUD MEETING & INPSECTION / PUMP THROUGH MI SWACO
	22:00 - 22:30	0.50	PRPSPD	07	A	P		SERVICE RIG
	22:30 - 23:00	0.50	PRPSPD	06	A	P		TIH HOLE PICKING UP 15 JTS DRILL PIPE
	23:00 - 0:00	1.00	DRLPRO	02	F	P		DRILL CEMENT & SHOE TRACK FROM 2,907' TO 3,023' CLEAN OUT RATHOLE TO 3,047'
4/27/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 3,047' TO 3,667' = 620 ' @ 103.33 FPH WOB 18,000-22,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 1,950/ 1,725 TORQUE ON/OFF BTM 8,000/ 4,000 PICK UP WT 110,000 SLACK OFF WT 92,000 ROT WT 104,000 SLIDE 84' IN 100 MIN 27.7% OF FOOTAGE DRILLED,13.18 %OF HRS DRILLED MUD WT 8.4 VIS 27

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 17:00	11.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 3,667' TO 4,793' = 1,126 ' @ 102.36 FPH WOB 18,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2130/ 1730 TORQUE ON/OFF BTM 9,000/ 7,000 PICK UP WT 134,000 SLACK OFF WT 110,000 ROT WT 119,000 SLIDE 152' IN 115 MIN 17.42% OF FOOTAGE DRILLED,13.4 %OF HRS DRILLED MUD WT 8.4 VIS 27
	17:00 - 17:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 4,793'
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 4,793' TO 5,497' = 704 ' @ 108.30 FPH WOB 18,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2270/ 1830 TORQUE ON/OFF BTM 11,000/ 10,000 PICK UP WT 155,000 SLACK OFF WT 116,000 ROT WT 130,000 SLIDE 68' IN 110 MIN 28.2% OF FOOTAGE DRILLED,9.7 %OF HRS DRILLED MUD WT 8.4 VIS 27
4/28/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 5,497' TO 5,950' = 453 ' @ 75.5 FPH WOB 18,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2260/ 1890 TORQUE ON/OFF BTM 11,000/ 10,000 PICK UP WT 165,000 SLACK OFF WT 118,000 ROT WT 137,000 SLIDE 84' IN 100 MIN 27.7% OF FOOTAGE DRILLED,13.18 %OF HRS DRILLED MUD WT 8.5 VIS 27

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 13:00	7.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 5,950' TO 6,590' = 640 ' @ 91.42 FPH WOB 22,000-28,000 TOP DRIVE RPM 40-65 MUD MOTOR RPM 79 PUMPS 110 SPM=495 GPM PUMP PRESSURE ON/OFF BTM 1920/ 1730 TORQUE ON/OFF BTM 13,000/ 14,000 PICK UP WT 175,000 SLACK OFF WT 130,000 ROT WT 148,000 SLIDE 25' IN 35 MIN 8.3% OF FOOTAGE DRILLED,3.8 %OF HRS DRILLED MUD WT 8.4 VIS 27 70 BBL MUD LOSE
	13:00 - 13:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 6,590'
	13:30 - 0:00	10.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 6,590' TO 7,490' = 900 ' @ 85.71FPH WOB 22,000-28,000 TOP DRIVE RPM 45-65 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2350/2080 TORQUE ON/OFF BTM 16,000/ 14,000 PICK UP WT 206,000 SLACK OFF WT 138,000 ROT WT 163,000 SLIDE 14' IN 45 MIN .07% OF FOOTAGE DRILLED,.015 %OF HRS DRILLED MUD WT 8.5 VIS 27
4/29/2012	0:00 - 2:00	2.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 7,490' TO 7,638' =148 ' @ 74 FPH WOB 22,000-26,000 TOP DRIVE RPM 45-65 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2350/2080 TORQUE ON/OFF BTM 16,000/ 14,000 PICK UP WT 206,000 SLACK OFF WT 138,000 ROT WT 163,000 SLIDE 5' IN 15 MIN 4.1% OF FOOTAGE DRILLED,3.3 %OF HRS DRILLED MUD WT 8.5 VIS 28
	2:00 - 7:00	5.00	DRLPRO	22	A	X		CIRCULATING WORKING TIGHT HOLE @ 7,638' / PIPE STUCK UNABLE TO ROTATE OR PULL PIPE FREE / PIPE FREE @ 06:00 WITH 375K ON WT INICATOR / STRING WT 163K MAX PULL ON WT INDICATOR WAS 400K / CONTINUE TO ROTATE & CIRCULATE WHILE RAISING VIS.

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 16:00	9.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 7,638' TO 8,196' =558 ' @ 62 FPH WOB 22,000-30,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2450/2220 TORQUE ON/OFF BTM 18,000/ 17,000 PICK UP WT 210,000 SLACK OFF WT 145,000 ROT WT 172,000 SLIDE 38' IN 70 MIN 11.1% OF FOOTAGE DRILLED,6.7 %OF HRS DRILLED MUD WT 8.7 VIS 37
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 8,96' / SLOW PUMP RATE
	16:30 - 20:00	3.50	DRLPRO	06	E	P		WIPER TRIP FROM 8,196' TO 5,200' WITH NO PROBLEMS / NO FILL
	20:00 - 0:00	4.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 8,196' TO 8,445' = 249 ' @ 62.25 FPH WOB 22,000-30,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2578/2151 TORQUE ON/OFF BTM 19,000/ 17,000 PICK UP WT 225,000 SLACK OFF WT 150,000 ROT WT 177,000 MUD WT 8.7 VIS 36 MI SWACO ON LINE 10 TO 15' FLARE
4/30/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 8,445' TO 8,764' = 319 ' @ 53.16FPH WOB 22,000-30,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 88 PUMPS 120 SPM=550 GPM PUMP PRESSURE ON/OFF BTM 2578/2151 TORQUE ON/OFF BTM 18,000/ 19,000 PICK UP WT 225,000 SLACK OFF WT 150,000 ROT WT 180,000 MUD WT 8.9 VIS 37 MI SWACO ON LINE 10 TO 20' FLARE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 16:30	10.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 8,764' TO 9,330' = 566 ' @ 53.90 FPH WOB 24,000-30,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 79 PUMPS 110 SPM=495 GPM PUMP PRESSURE ON/OFF BTM 2750/2550 TORQUE ON/OFF BTM 19,000/ 21,000 PICK UP WT 265,000 SLACK OFF WT 160,000 ROT WT 179,000 MUD WT 9.2 VIS 39 MI SWACO ON LINE / 200 TO 600 PSI ON ANNULUS 15 TO 40' FLARE
	16:30 - 17:30	1.00	DRLPRO	22	M	X		WORK BIT BACK TO BOTTOM AFTER CONNECTION DUE TO HIGH TORQUE / DRILL STRING STALLING OUT MAX TORQUE @ 21,000 FT LBS.
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 9,330' TO 9,640' = 310 ' @ 47.69 FPH WOB 24,000-34,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 79 PUMPS 110 SPM=495 GPM PUMP PRESSURE ON/OFF BTM 2750/2550 TORQUE ON/OFF BTM 17,000/ 21,000 PICK UP WT 268,000 SLACK OFF WT 160,000 ROT WT 192,000 MUD WT 10.0 VIS 39 LCM 6% ADDING DRILL GLIDE & ANCO DRILL / RAISING MUD WT & LCM CONTENT TO HELP REDUCE TORQUE MI SWACO ON LINE / 150 TO 350 PSI ON ANNULUS 15 TO 20' FLARE
5/1/2012	0:00 - 7:00	7.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 9,640' TO 9,985' = 345 ' @ 49.28 FPH WOB 24,000-30,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 79 PUMPS 110 SPM=495 GPM PUMP PRESSURE ON/OFF BTM 2550/2200 TORQUE ON/OFF BTM 20,000/ 21,000 PICK UP WT 320,000 SLACK OFF WT 145,000 ROT WT 197,000 MUD WT 10.1 VIS 40 LCM 8% ADDING DRILL GLIDE & ANCO DRILL /AND LCM TO HELP REDUCE TORQUE MI SWACO ON LINE / 150 TO 350 PSI ON ANNULUS 15 TO 20' FLARE
	7:00 - 9:00	2.00	DRLPRO	22	M	X		ATTEMPT TO WORK BIT BACK TO BOTTOM TO DRILL CONTINUALLY STALLING OUT @ 21,000 FT LBS. DUE TO HIGH TORQUE / CONTINUE TO ADD DRILL GLIDE , ANCO DRILL & LCM TO REDUCE TORQUE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	9:00 - 14:00	5.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 9,985' TO 10,220' = 235 ' @ 47 FPH WOB 20,000-28,000 TOP DRIVE RPM 45-70 MUD MOTOR RPM 79 PUMPS 110 SPM=495 GPM PUMP PRESSURE ON/OFF BTM 2550/2200 TORQUE ON/OFF BTM 20,000/ 21,000 PICK UP WT 330,000 SLACK OFF WT 150,000 ROT WT 200,000 MUD WT 10.2 VIS 40 LCM 8% ADDING DRILL GLIDE & ANCO DRILL /AND LCM TO HELP REDUCE TORQUE MI SWACO ON LINE / 150 TO 350 PSI ON ANNULUS 15 TO 20' FLARE
	14:00 - 14:30	0.50	DRLPRO	06	E	P		FLOW CHECK - NO FLOW - PUMP 2 STDS OUT WELL FLOWING -GO BACK TO BTM CIRC & COND MUD WHILE BUILDING 80 BBL 12.3 PPG PILL
	14:30 - 16:00	1.50	DRLPRO	05	A	P		CIRC & CONDITION - WHILE BUILDING 80 BBL 12.3 BBL PILL TO SPOT - PUMP & SPOT SAME
	16:00 - 18:00	2.00	DRLPRO	06	E	P		20 STAND WIPER TRIP FROM 10,220' TO 8,385' W/ NO PROBLEMS - NO FILL
	18:00 - 18:30	0.50	DRLPRO	02	D	P		ATTEMPT TO DRILL - TDS CONTINUALLY STALLING OUT
	18:30 - 19:00	0.50	DRLPRO	22	N	X		BOTTOMS UP GAS @ SURFACE,TRIP TANK GAINING SHUT MI SWACO IN, TRIP TANK OVER FLOW/ SHUT PUMPS DOWN SHUT WELL IN / TRIP TANK VALVE LEFT OPEN ON FILL LINE / CIRC GAS OUT SWITCH BACK TO MI SWACO
	19:00 - 20:00	1.00	DRLPRO	02	D	P		TRANSFER 100 BBL MUD TO SLUG TANK BEGIN WEIGHTING PILL UP TO 12.2 PPG MEANWHILE CONTINUE TO DRILL WITH TDS STALLING OUT MAKE 30' OF HOLE WHILE BUILDING PILL. DRILL FROM 10,220' TO 10,250'
	20:00 - 21:00	1.00	DRLPRO	05	A	P		CIRCULATE WHILE BUILDING 12.2 PPG PILL
	21:00 - 0:00	3.00	DRLPRO	06	A	P		PUMP & SPOT 100 BBL 12.2 PPG PILL - FLOW CHECK - OK / TRIP OUT OF HOLE F/ 10,250' TO 5,300'
5/2/2012	0:00 - 2:30	2.50	DRLPRO	06	A	P		CONT TOOH F/ 5,300 TO SHOE @ 3,023' FLOW CHECK - NO FLOW TOOH TO HWT DRILL PIPE FLOW CHECK - WELL FLOWING 1/2" STREAM, CONTINUE MONITORING WELL WHILE STANDING BACK 4 STDS HWT DRILL PIPE – WELL FLOWING 1/2" STREAM
	2:30 - 5:00	2.50	DRLPRO	06	F	S		TRIP IN HOLE TO 7,000' MONITORING WELL - FLOWING SLIGHTLY AFTER EACH STAND OF DRILL PIPE DISPLACEMENT
	5:00 - 6:00	1.00	DRLPRO	05	C	P		CIRC BTM'S UP @ 7,000' MEANWHILE BUILD 12.2 PPG PILL TO SPOT
	6:00 - 11:30	5.50	DRLPRO	06	A	P		PUMP & SPOT 90 BBL 12.2 PPG PILL TOOH TO SHOE @ 3,023' FLOW CHECK - NO FLOW - PULL TO HWT DRILL PIPE CHECK FLOW - NO FLOW TOOH LD MUD MOTOR & BIT

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE WHILE MONITORING WELL - WELL STATIC
	12:00 - 12:30	0.50	DRLPRO	06	A	P		PICK UP & MAKE UP MUD MOTOR & BIT # 2 CHANGE BATTERIES IN MWD SCRIBE & ORIENTATE SAME - WELL FLOWING 1" STREAM
	12:30 - 14:30	2.00	DRLPRO	06	A	S		TIH W/ 3 STDS OF HEAVY WEIGHT DRILL PIPE ELEVATORS LATCHED AROUND SPIRAL PART OF HWT DP- ELEVATORS HUNG ATTEMPT TO UNLATCH - NO GO BACK OUT STAND - LAY DOWN TOP SINGLE WITH ELEVATORS STUCK ON PIPE DURING THIS TIME WELL SHUT IN CONTINUE TO MONITOR WELL PRESSURE BLEED OFF 40 TO 50 PSI & PUMP 1 BBL MUD DOWN BACK SIDE (MAX ANNULUS PRESSURE 380 PSI)
	14:30 - 19:30	5.00	DRLPRO	06	A	S		REDUCE ANNULAR ELEMENT PRESSURE, TRIP IN HOLE STRIPPING 5 STANDS OF DRILL PIPE THRU ANNULAR , INSTALL NEW ROTATING RUBBER , STRIP IN HOLE ATTEMPTING TO MAINTAIN 300 PSI ON ANNULUS BLEEDING OFF EQUIVALENT CLOSED IN DISPLACEMENT, CIRC BTM'S UP @ SHOE CONTINUE TO STRIP IN HOLE TO 6,500'
	19:30 - 20:30	1.00	DRLPRO	05	A	P		CIRC BOTTOMS UP @ 6,500' USING MI SWACO PRESSURE CONTROL EQUIPMENT 30 TO 50' FLARE MAINTAINING 325 TO 375 PRESSURE ON ANNULUS / FLOW CHECK WELL FLOWING 3 TO 4" STREAM
	20:30 - 22:00	1.50	DRLPRO	06	A	P		TIH STRIPPING THRU ROTATING HEAD TO 9,055' HOLDING 250 TO 300 PSI WITH MI SWACO PRESSURE CONTROL EQUIPMENT
	22:00 - 0:00	2.00	DRLPRO	05	A	P		CIRC BOTTOMS UP @ 9,055' 20 TO 30' FLARE MUD WT 10.8 PPG
5/3/2012	0:00 - 2:00	2.00	DRLPRO	06	A	P		TRIP HOLE WITH BIT & BHA # 2 F/ 9,055' TO 10,250' - NO FILL
	2:00 - 13:00	11.00	DRLPRO	02	D	P		DRILL / SURVEY FROM 10,250' TO 10,666' = 416 ' @ 37.81FPH WOB 12,000-25,000 TOP DRIVE RPM 45-80 MUD MOTOR RPM 72 PUMPS 100 SPM=450 GPM PUMP PRESSURE ON/OFF BTM 2530-2370 TORQUE ON/OFF BTM 21,000/ 16,000 PICK UP WT 272,000 SLACK OFF WT 168,000 ROT WT 200,000 MUD WT 11.0 VIS 43 LCM 6% MI SWACO ON LINE @ 10,568' / 100 TO 170 PSI ON ANNULUS
	13:00 - 13:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 10,666'

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	13:30 - 0:00	10.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 10,666' TO 11,025' = 359 ' @ 34.19 FPH WOB 12,000-25,000 TOP DRIVE RPM 45-80 MUD MOTOR RPM 72 PUMPS 100 SPM=450 GPM PUMP PRESSURE ON/OFF BTM 2530-2370 TORQUE ON/OFF BTM 21,000/ 20,000 PICK UP WT 275,000 SLACK OFF WT 170,000 ROT WT 205,000 MUD WT 11.0 VIS 43 LCM 6% MI SWACO ON LINE @ 10,568' / 100 TO 150 PSI ON ANNULUS
5/4/2012	0:00 - 14:30	14.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 11,025' TO 11,515' = 490 ' @ 33.79 FPH WOB 12,000-25,000 TOP DRIVE RPM 45-80 MUD MOTOR RPM 72 PUMPS 100 SPM=450 GPM PUMP PRESSURE ON/OFF BTM 2925 / 2,700 TORQUE ON/OFF BTM 21,000/ 21,000 PICK UP WT 262,000 SLACK OFF WT 178,000 ROT WT 212,000 MUD WT 11.6 VIS 43 LCM 6% MI SWACO ON LINE @ 10,568' / 100 TO 150 PSI ON ANNULUS 5' 10' FLARE MIX & ADD 480 GAL TORQUE BUSTER, ATTEMPT TO LOWER TORQUE
	14:30 - 15:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 11,515'
	15:00 - 16:30	1.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 11,515' TO 11,574' TD = 59 ' @ 39.33 FPH WOB 12,000-25,000 TOP DRIVE RPM 45-80 MUD MOTOR RPM 72 PUMPS 100 SPM=450 GPM PUMP PRESSURE ON/OFF BTM 2925 / 2,700 TORQUE ON/OFF BTM 21,000/ 21,000 PICK UP WT 265,000 SLACK OFF WT 178,000 ROT WT 213,000 MUD WT 11.6 VIS 43 LCM 6% MI SWACO ON LINE 100 TO 150 PSI ON ANNULUS 5' 10' FLARE ON BOTTOMS AFTER RIG SERVICE
	16:30 - 17:30	1.00	DRLPRO	05	C	P		CIRC BOTTOMS UP @ 11,574' TD
	17:30 - 19:30	2.00	DRLPRO	06	E	P		WIPER TRIP FROM 11,574' TO 10,250'
	19:30 - 0:00	4.50	DRLPRO	05	C	P		CIRC & CONDITION MUD @ 11,574' / 30 TO 40' FLARE HOLDING 450 PSI ON ANNULUS ON BOTTOMS UP RAISE MUD WT TO 11.9 PPG MI SWACO OFF LINE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/5/2012	0:00 - 7:00	7.00	DRLPRO	06	A	P		PUMP & SPOT 100 BBL 13.0 PPG PILL / TOOH LD DIRECTIONAL TOOLS / HOLE TOOK PROPER FILL / NO FLOW
	7:00 - 8:00	1.00	DRLPRO	14	B	P		PULL SMITH BEARING ASSY ,PULL WEAR BUSHING , INSTALL BEARING ASSY.
	8:00 - 8:30	0.50	DRLPRO	12	A	P		CHANGE OUT BAILS
	8:30 - 10:00	1.50	DRLPRO	12	A	P		PRE JOB SAFETY MEETING RIG CASING CREW
	10:00 - 11:30	1.50	DRLPRO	12	C	P		RUN 4 1/2" PRODUCTION CSG TO 1,100' CHECK FLOATS
	11:30 - 12:30	1.00	DRLPRO	22	L	Z		REPAIR & CHANGE OUT KIMZEY TONGS
	12:30 - 14:00	1.50	DRLPRO	12	C	P		CONTINUE TO RUN 4 1/2" PRODUCTION CSG TO SHOE @ 3,023' INSTALL ROTATING HEAD RUBBER
	14:00 - 14:30	0.50	DRLPRO	22	L	Z		CHANGE OUT KIMZEY TONGS
	14:30 - 18:30	4.00	DRLPRO	12	C	P		CONTINUE TO RUN 4 1/2" PRODUCTION CSG TO X-O @ 5,038' PREFORM DUMP TEST ON TONGS FILL CSG
	18:30 - 20:00	1.50	DRLPRO	22	L	P		KIMSEY ELEVATOR PIN BENT ON LATCH, NO BACK UPS WAIT FOR REPLACEMENT ELEVATORS TO ARRIVE / CHANGE OUT ELEVATORS
	20:00 - 0:00	4.00	DRLPRO	12	E	P		CONTINUE TO RUN 4 1/2" PRODUCTION CSG TO 9,300'
5/6/2012	0:00 - 2:00	2.00	DRLPRO	12	C	P		CONTINUE TO RUN 4 1/2" PRODUCTION CASING FROM 9,300' to 11,560' / FLOAT COLLAR @ 11,536' BLACK HAWK MARKER @ 10,968' , M VERDE MARKER @ 8,202', X-O @ 5,038' / LAYDOWN BAD X-O JT & 2 DQX JTs REPLACE SAME
	2:00 - 3:30	1.50	DRLPRO	05	A	P		CIRCULATE & CONDITION MUD / 10 TO 25' FLAARE ON BOTTOMS UP / MEANWHILE RIG DOWN KIMZEY CASING EQUIPMENT HOLD PRE JOB MEETING WITH BJ SERVICES
	3:30 - 7:00	3.50	DRLPRO	12	E	P		INSTALL BJ CMT HEAD , TEST PUMP & LINES TO 7,750 PSI, ,DROP BOTTOM PLUG PUMP 25 BBLS FW @ 8.3PPG PUMP 590 SKS LEAD CEMENT @ 12.5 PPG,212 BBL SLURRY (PREM LITE II + .0.25 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 8% bwoc BENTONITE + .0.2% bwoc SODIUM META SILICATE +.5 % R-3 +0.4% BWOC FL-52A + 101.8% FRESH WATER / (10.62 gal/sx, 2.02 yield) + 1,286 SX TAIL @ 14.3 ppg 301.27 BBL SLURRY (CLS G 50/50 POZ + 10% SALT + .05llbs/sx STATIC FREE + .2% R3 +0.5% BWOC EC-1 .002 GPS FP-6L + 2% BENTONITE + 58.9% FW / (5.94 gal/sx, 1.31 yield) / DROP TOP PLUG & DISPLACE W/ 179 BBLS H2O + ADDITIVES / PLUG DOWN @06:29 HOURS / FLOATS HELD W/ 2.5 BBLS H2O RETURNED TO INVENTORY/ GOOD CIRC THROUGH OUT 2 BBLS LEAD CMT TO SURFACE / LIFT PRESSURE @3,159 PSI / BUMP PRESSURE TO 3,782 PSI / TOP OF TAIL CEMENT CALCULATED @ 4,800' / RIG DOWN CMT EQUIPMENT
	7:00 - 9:00	2.00	DRLPRO	14	A	P		FLUSH BOP & EQUIPMENT / PRE JOB SAFETY MEETING / NIPPLE DOWN BOP & EQUIPMENT

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/6/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	9:00 - 11:00	2.00	DRLPRO	14	B	P		SET SLIPS WITH WEATHERFORD @ 115K / CUT & LAY DOWN CUT OFF CASING / CLEAR FLOOR CLEAN PITS RELEASE RIG @ 5/6/12 11:00

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-21F4S RED	**Wellbore No.**	OH
Well Name	NBU 921-21F4S	**Wellbore Name**	NBU 921-21F4S
Report No.	1	**Report Date**	7/9/2012
Project	UTAH-UINTAH	**Site**	NBU 921-21E PAD
Rig Name/No.		**Event**	COMPLETION
Start Date	7/9/2012	**End Date**	7/23/2012
Spud Date	3/5/2012	**Active Datum**	RKB @4,864.00usft (above Mean Sea Level)
UWI	SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

1.3 General

Contractor	CASED HOLE SOLUTIONS	**Job Method**	PERFORATE	**Supervisor**	ED GUDAC
Perforated Assembly	PRODUCTION CASING	**Conveyed Method**	WIRELINE		

1.4 Initial Conditions

Fluid Type	KCL WATER	**Fluid Density**	
Surface Press		**Estimate Res Press**	
TVD Fluid Top		**Fluid Head**	
Hydrostatic Press		**Press Difference**	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	8,286.0 (usft)-11,359.0 (us	**Start Date/Time**	7/9/2012 12:00AM
No. of Intervals	51	**End Date/Time**	7/9/2012 12:00AM
Total Shots	216	**Net Perforation Interval**	69.00 (usft)
Avg Shot Density	3.13 (shot/ft)	**Final Surface Pressure**	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESAVERDE/			8,286.0	8,287.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESAVERDE/			8,331.0	8,332.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,359.0	8,360.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,387.0	8,388.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,412.0	8,413.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,480.0	8,482.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,616.0	8,618.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,640.0	8,642.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,736.0	8,738.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,760.0	8,761.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,841.0	8,842.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,899.0	8,900.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,907.0	8,908.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,923.0	8,924.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,960.0	8,961.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			8,996.0	8,998.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,084.0	9,085.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,158.0	9,160.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,276.0	9,278.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,292.0	9,293.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,351.0	9,354.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,572.0	9,573.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESAVERDE/			9,597.0	9,598.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,621.0	9,622.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,659.0	9,660.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,700.0	9,702.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,744.0	9,746.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,790.0	9,791.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,803.0	9,804.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,819.0	9,820.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,865.0	9,866.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,884.0	9,885.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,907.0	9,908.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			9,959.0	9,960.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			10,017.0	10,018.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			10,028.0	10,030.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			10,118.0	10,119.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			10,134.0	10,136.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			10,168.0	10,170.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,024.0	11,025.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,042.0	11,044.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,066.0	11,067.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,100.0	11,102.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESAVERDE/			11,129.0	11,130.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,151.0	11,152.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,197.0	11,199.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,206.0	11,207.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,220.0	11,221.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,306.0	11,307.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,336.0	11,338.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESAVERDE/			11,358.0	11,359.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

3 Plots

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/5/2012	-							
7/10/2012	8:00 - 9:45	1.75		33		P		HELD SAFETY MEETING HIGH PRESSURES FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 15 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 46 PSI. 1ST PSI TEST T/ 9000 PSI. HELD FOR 30 MIN LOST 64 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFW
7/12/2012	7:30 - 10:30	3.00	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWIFW

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED			Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012		End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/16/2012	9:00 - 18:00	9.00	COMP	36	B	P		FRAC STG 1)WHP 1525 PSI, BRK 4318 PSI @ 7.2 BPM. ISIP 3594 PSI, FG .76. CALC PERFS OPEN @ 51.6 BPM @ 6135 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3890 PSI, FG .78, NPI 296 PSI. MP 8380 PSI, MR 55.6 BPM, AP 6034 PSI, AR 51.1 BPM, PUMPED 30/50 TLC SAND. SWI, X-OVER FOR WL. PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 11,182' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW. FRAC STG 2)WHP 2340 PSI, BRK 4362 PSI @ 6.5 BPM. ISIP 3790 PSI, FG .78. CALC PERFS OPEN @ 50.1 BPM @ 6473 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 4039 PSI, FG .80, NPI 2496 PSI. MP 7992 PSI, MR 53.5 BPM, AP 6402 PSI, AR 50.1 BPM, PUMPED 30/50 TLC SAND. SWI, X-OVER FOR WL. PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 10,220' P/U PERF AS PER DESIGN. FRAC STG 3)WHP 1340 PSI, BRK 3219 PSI @ 4.7 BPM. ISIP 2606 PSI, FG .70. CALC PERFS OPEN @ 50.1 BPM @ 5331 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3095 PSI, FG 0.75, NPI 489 PSI. MP 5667 PSI, MR 52.5 BPM, AP 5117 PSI, AR 50.5 BPM, PUMPED 30/50 TLC SAND. SWI, X-OVER FOR WL. PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9,990' P/U PERF AS PER DESIGN.

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/17/2012	7:00 - 18:00	11.00	COMP	36	E	P		FRAC STG 4)WHP 2250 PSI, BRK 3410 PSI @ 4.6 BPM. ISIP 2769 PSI, FG .72. CALC PERFS OPEN @ 50.5 BPM @ 5232 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3240 PSI, FG .77, NPI 471 PSI. MP 6019 PSI, MR 52.1 BPM, AP 5104 PSI, AR 49.2 BPM, PUMPED 30/50 OWATTA SAND PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9776' P/U PERF AS PER DESIGN. FRAC STG 5)WHP 2810 PSI, BRK 3701 PSI @ 4.7 BPM. ISIP 2538 PSI, FG .70. CALC PERFS OPEN @ 49.1 BPM @ 6130 PSI = 75% HOLES OPEN. (18/24 HOLES OPEN) ISIP 3216 PSI, FG .77, NPI 678 PSI. MP 6295 PSI, MR 52.1 BPM, AP 5518 PSI, AR 49.8 BPM, PUMPED 30/50 OWATTA SAND PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9404' P/U PERF AS PER DESIGN. FRAC STG 6)WHP 1420 PSI, BRK 3156 PSI @ 4.7 BPM. ISIP 2150 PSI, FG .67. CALC PERFS OPEN @ 51.4 BPM @ 4633 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2775 PSI, FG .74, NPI 625 PSI. MP 5777 PSI, MR 53.2 BPM, AP 5050 PSI, AR 50.3 BPM, PUMPED 30/50 OWATTA SAND PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9115' P/U PERF AS PER DESIGN. FRAC STG 7)WHP 975 PSI, BRK 2747 PSI @ 4.7 BPM. ISIP 2096 PSI, FG .67. CALC PERFS OPEN @ 53.1 BPM @ 4925 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2969 PSI, FG .77, NPI 873 PSI. MP 5170 PSI, MR 56.6 BPM, AP 4654 PSI, AR 53 BPM, PUMPED 30/50 OWATTA SAND PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/18/2012	7:00 - 7:18	0.30	COMP	36	E	P		CBP @ 8872' P/U PERF AS PER DESIGN. FRAC STG 8)WHP 1570 PSI, BRK 2848 PSI @ 4.6 BPM. ISIP 1870 PSI, FG .65. CALC PERFS OPEN @ 52.5 BPM @ 4808 PSI = 96% HOLES OPEN. (23/24 HOLES OPEN) ISIP 2775 PSI, FG .76, NPI 905 PSI. MP 5266 PSI, MR 54.1 BPM, AP 4903 PSI, AR 52.7 BPM, PUMPED 30/50 OWATTA SAND PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8532' P/U PERF AS PER DESIGN. FRAC STG 9)WHP 1185 PSI, BRK 2346 PSI @ 4.7 BPM. ISIP 1622 PSI, FG .63. CALC PERFS OPEN @ 52.7 BPM @ 4490 PSI = 96% HOLES OPEN. (23/24 HOLES OPEN) ISIP 2766 PSI, FG .77, NPI 744 PSI. MP 5216 PSI, MR 54.1 BPM, AP 4858 PSI, AR 52.6 BPM, PUMPED 30/50 OWATTA SAND KILL PLUG) RIH W/ HAL 8K CBP, SET CBP @ 8236', R/D FRAC AND WIRELINE CREW, TOTAL WATER = 14292 BBLS TOTAL SAND = 315,598#
7/19/2012	-							
7/20/2012	7:00 - 7:15	0.25	COMP	48		P		SAFETY=JSA.
	7:15 - 16:30	9.25	COMP	30		P		WELL 0#. MIRU. NDWH. NU 10K BOP. X/O PIPE RAM ELEMENTS. R/U PUMP. TEST BLIND RAMS GOOD @ 4000#. P/U & RIH W/ 3-7/8" ROCK BIT + POBS + XN +259 JTS NEW 2-3/8" P-110 TBNG. T/U ON KILL CBP @ 8236'. L/D 1JT TBNG. TEST BOP'S GOOD @4000#. R/U POWER SWIVEL. PREP FOR D/O MONDAY A.M. SWIFN.
7/21/2012	7:00 - 7:15	0.25	COMP	48		P		SAFETY = JSA (WORKING AROUND PRESSURE).

Operation Summary Report

Well: NBU 921-21F4S RED			Spud Date: 3/5/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012		End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 18:30	11.25	COMP	30		P		P/U 1 JT TBNG W/ POWER SWIVEL. R/U PUMP. BREAK CIRC. D/O CBP'S AS FOLLOWS: CBP #1) DRLG OUT BAKER 8K CBP @ 8236' IN 11 MIN. 700 LBS DIFF. PSI. RIH, TAG SND @ 8480'. C/O 40' OF SND. FCP = 50 PSI. CBP #2) DRLG OUT BAKER 8K CBP @ 8532' IN 7 MIN. 1100 LBS DIFF. PSI. RIH, TAG SND @ 8832'. C/O 40' OF SND. FCP = 200 PSI. CBP #3) DRLG OUT BAKER 8K CBP @ 8872' IN 10 MIN. 1100 LBS DIFF. PSI. RIH, TAG SND @ 8970'. C/O 45' OF SND. FCP = 300 PSI. CBP #4) DRLG OUT BAKER 8K CBP @ 9115' IN 3 MIN. 700 LBS DIFF. PSI. RIH, TAG SND @ 9360'. C/O 24' OF SND. FCP = 400 PSI. CBP #5) DRLG OUT BAKER 8K CBP @ 9404' IN 3 MIN. 600 LBS DIFF. PSI. RIH, TAG SND @ 9750'. C/O 26' OF SND. FCP = 400 PSI. CBP #6) DRLG OUT BAKER 8K CBP @ 9776' IN 7 MIN. 700 LBS DIFF. PSI. RIH, TAG SND @ 9975'. C/O 15' OF SND. FCP = 350 PSI. CBP #7) DRLG OUT BAKER 8K CBP @ 9990' IN 7 MIN. 700 LBS DIFF. PSI. RIH, TAG SND @ 10,235'. C/O 35' OF SND. FCP = 500 PSI. CBP #8) DRLG OUT BAKER 8K CBP @ 10,220' IN 9 MIN. 600 LBS DIFF. PSI. RIH, TAG SND @ 11,140'. C/O 42' OF SND. FCP = 500 PSI. CBP #9) DRLG OUT BAKER 8K CBP @ 11,182' IN 4 MIN. 800 LBS DIFF. PSI. LAST PLUG RIH, TAG SND @ 11,390 '. C/O TO 11,480' W/ 361 JTS 2-3/8" P-110 TBNG. CIRC WELL CLEAN. FCP=950#. L/D 16 JTS & LAND WELL ON HANGER AS FOLLOWS: KB= 26' HANGER = .83' 345 JTS 2-3/8" P-110 4.7# TBNG = 10,953.27' XN = 1.34' POBS= 2.40'

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21F4S RED		Spud Date: 3/5/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012		End Date: 7/23/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2329/W/0/708/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								EOT@ 10,983.84' NDBOP. NUWH. PRESSURE TEST FLOW LINES GOOD @4000 PSI. W/ NO LEAKS. DROP BALL & PUMP OFF BIT @ 3000 PSI. RDMO. TURN WELL OVER TO FLOWBACK CREW @ 1700 HRS. SICP =2900 PSI. SITP= 1450 PSI. TWLTR = 12,300 BBLS. NOTE: THE SEALS ON THE HANGER WERE GETTING KNOCKED OFF IN THE HYDRILL WHILE LANDING THE WELL. HANGER HAD A VERY SLIGHT LEAK. FOREMAN DECIDED TO LAND THE WELL & REPLACE THE SEALS IN THE FUTURE AFTER THE WELL HAD PRODUCED & DIED DOWN.
	18:30 - 18:30	0.00	COMP	50				WELL TURNED TO SALES 7/23/2012 @ 16:30 HR, 2900 MCFD, 1920 BWPD, FCP 2900#, FTP 1400#, 20/64" CK.

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 921-21E PAD
NBU 921-21F4S

NBU 921-21F4S

Design: NBU 921-21F4S

Standard Survey Report

15 May, 2012

Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21E PAD
Well: NBU 921-21F4S
Wellbore: NBU 921-21F4S
Section:
SHL:
Design: NBU 921-21F4S (wp01)
Latitude: 40.022475
Longitude: -109.562944
GL: 4838.00
KB: 4838 GL + 26' RKB @ 4864.00ft (h&p 298)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4957.00	5286.29	WASATCH
5557.00	5895.23	TOP OF CYLINDER
7907.00	8245.43	MESAVERDE
10150.00	10488.45	SEGO
10229.00	10567.45	CASTLEGATE
10626.00	10964.45	BLACKHAWK

WELL DETAILS: NBU 921-21F4S

+N/-S	+E/-W	Northing	Ground Level: 4838.00 Easting	Latittude	Longitude	Slot
0.00	0.00	14537473.41	2042751.55	40.022475	-109.562944	

CASING DETAILS

TVD	MD	Name	Size
2852.43	3023.87	8-5/8"	8-5/8

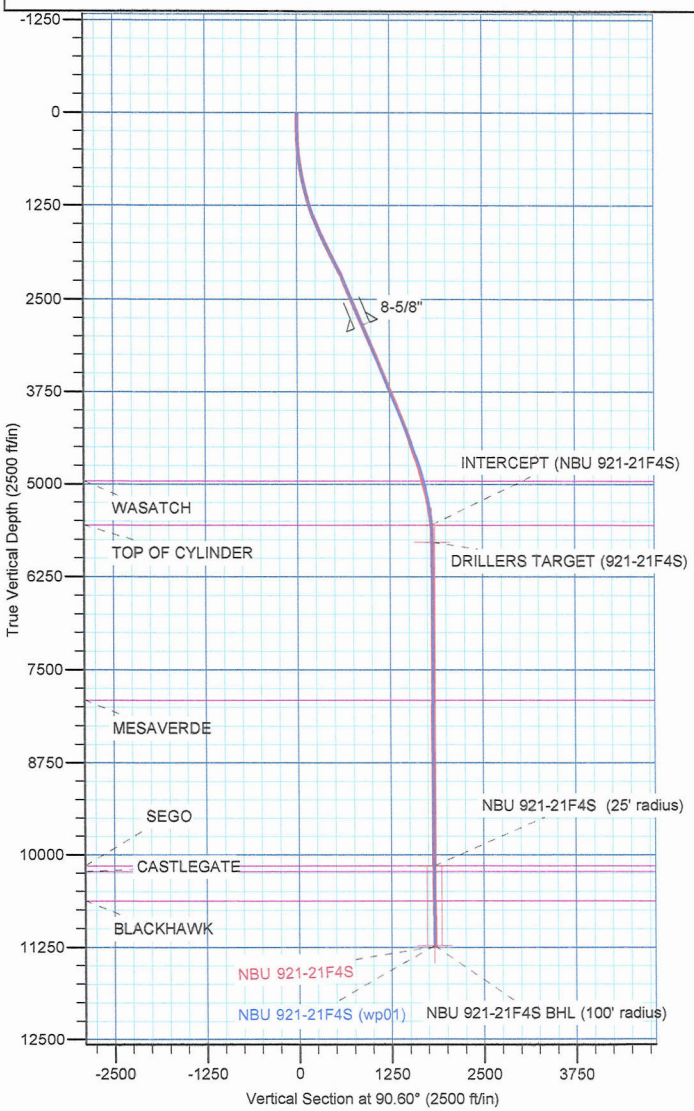
Azimuths to True North
Magnetic North: 11.00°
Magnetic Field
Strength: 52253.7snT
Dip Angle: 65.85°
Date: 4/3/2012
Model: IGRF2010

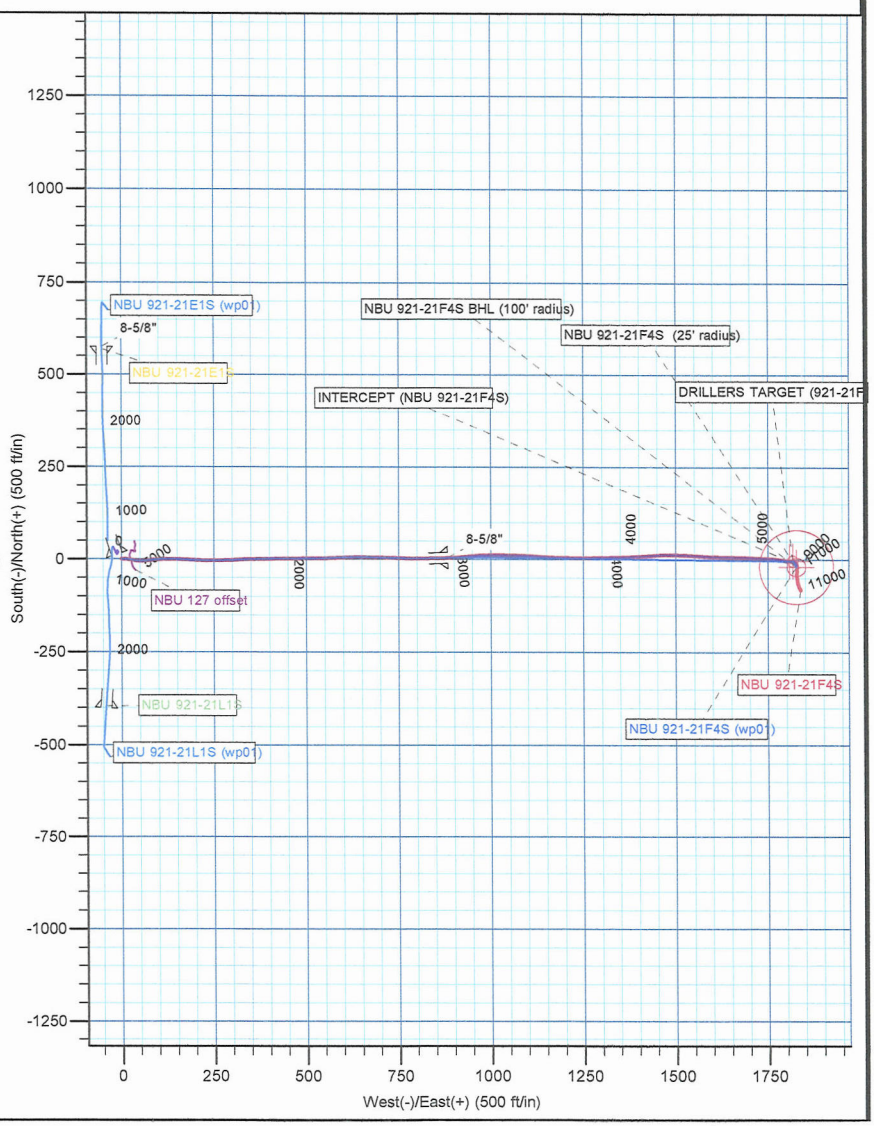
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
INTERCEPT (NBU 921-21F4S)	5557.00	-3.15	1808.27	14537499.43	2044559.63	40.022466	-109.556486	Point
DRILLERS TARGET (921-21F4S)	5786.00	-3.24	1816.29	14537499.47	2044567.65	40.022466	-109.556458	Circle (Radius: 15.00)
NBU 921-21F4S (25' radius)	10150.00	-19.24	1826.29	14537483.63	2044577.90	40.022422	-109.556422	Circle (Radius: 25.00)
NBU 921-21F4S BHL (100' radius)	11226.00	-19.24	1826.29	14537483.63	2044577.90	40.022422	-109.556422	Circle (Radius: 100.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2981.00	22.53	87.83	2812.83	3.71	865.88	0.00	0.00	865.80
3131.00	22.53	87.83	2951.38	5.88	923.32	0.00	0.00	923.21
3187.40	22.14	90.62	3003.55	6.18	944.75	2.00	111.30	944.63
4859.05	22.14	90.62	4551.90	-0.63	1574.81	0.00	0.00	1574.73
6124.42	0.00	0.00	5786.00	-3.24	1816.29	1.75	180.00	1816.22
6191.05	0.20	148.00	5852.63	-3.34	1816.35	0.30	148.00	1816.29
11564.45	0.20	148.00	11226.00	-19.24	1826.29	0.00	0.00	1826.39





Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 921-21F4S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Site:	UINTAH_NBU 921-21E PAD	**MD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Well:	NBU 921-21F4S	**North Reference:**	True
Wellbore:	NBU 921-21F4S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21F4S	**Database:**	edmp

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	UINTAH_NBU 921-21E PAD				
Site Position:		**Northing:**	14,537,473.41 usft	**Latitude:**	40.022475
From:	Lat/Long	**Easting:**	2,042,751.54 usft	**Longitude:**	-109.562944
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.92 °

Well	NBU 921-21F4S					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,537,473.41 usft	**Latitude:**	40.022475
	+E/-W	0.00 ft	**Easting:**	2,042,751.54 usft	**Longitude:**	-109.562944
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,838.00 ft

Wellbore	NBU 921-21F4S			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	4/3/2012	11.00	65.85	52,254

Design	NBU 921-21F4S				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	17.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	17.00	0.00	0.00	92.56	

Survey Program **Date** 5/15/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
217.00	2,981.00	Survey #1 (NBU 921-21F4S)	MWD	MWD - STANDARD
3,033.00	11,574.00	Survey #2 (NBU 921-21F4S)	MWD	MWD - STANDARD

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00
217.00	0.18	33.95	217.00	0.26	0.18	0.16	0.09	0.09	0.00
309.00	1.14	85.89	308.99	0.45	1.17	1.15	1.13	1.04	56.46
399.00	3.52	93.45	398.91	0.34	4.82	4.80	2.66	2.64	8.40
492.00	5.45	94.16	491.62	-0.15	12.08	12.07	2.08	2.08	0.76
586.00	6.86	100.66	585.08	-1.51	22.05	22.09	1.67	1.50	6.91
680.00	8.71	99.25	678.21	-3.69	34.59	34.72	1.98	1.97	-1.50
774.00	9.94	87.83	770.97	-4.53	49.72	49.87	2.36	1.31	-12.15
869.00	11.08	85.02	864.38	-3.43	67.01	67.10	1.32	1.20	-2.96
963.00	12.75	85.37	956.35	-1.81	86.35	86.34	1.78	1.78	0.37

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 921-21F4S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Site:	UINTAH_NBU 921-21E PAD	**MD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Well:	NBU 921-21F4S	**North Reference:**	True
Wellbore:	NBU 921-21F4S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21F4S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,056.00	14.42	87.65	1,046.75	-0.50	108.15	108.06	1.89	1.80	2.45
1,148.00	15.92	89.59	1,135.54	0.06	132.21	132.08	1.72	1.63	2.11
1,241.00	17.59	92.31	1,224.59	-0.42	159.01	158.87	1.98	1.80	2.92
1,335.00	19.52	93.37	1,313.70	-1.91	188.88	188.78	2.08	2.05	1.13
1,430.00	21.28	91.70	1,402.74	-3.36	221.96	221.89	1.95	1.85	-1.76
1,526.00	23.04	88.53	1,491.65	-3.39	258.16	258.05	2.22	1.83	-3.30
1,621.00	24.53	87.13	1,578.58	-1.93	296.44	296.23	1.68	1.57	-1.47
1,717.00	25.34	88.19	1,665.63	-0.28	336.88	336.56	0.96	0.84	1.10
1,812.00	26.12	88.62	1,751.21	0.86	378.10	377.69	0.84	0.82	0.45
1,905.00	26.91	89.67	1,834.42	1.48	419.62	419.13	0.99	0.85	1.13
2,000.00	27.70	89.94	1,918.84	1.63	463.19	462.66	0.84	0.83	0.28
2,094.00	27.87	89.50	2,002.00	1.84	507.01	506.43	0.28	0.18	-0.47
2,188.00	25.94	88.18	2,085.82	2.68	549.54	548.87	2.15	-2.05	-1.40
2,284.00	25.06	87.13	2,172.47	4.37	590.83	590.05	1.03	-0.92	-1.09
2,379.00	22.86	89.32	2,259.28	5.60	629.38	628.50	2.50	-2.32	2.31
2,474.00	22.42	91.43	2,346.96	5.36	665.94	665.04	0.97	-0.46	2.22
2,568.00	23.74	91.78	2,433.44	4.33	702.78	701.89	1.41	1.40	0.37
2,663.00	23.65	91.26	2,520.43	3.31	740.94	740.06	0.24	-0.09	-0.55
2,757.00	23.83	91.08	2,606.47	2.54	778.78	777.89	0.21	0.19	-0.19
2,850.00	22.64	89.42	2,691.93	2.37	815.46	814.54	1.46	-1.28	-1.78
2,943.00	22.69	88.00	2,777.75	3.18	851.29	850.30	0.59	0.05	-1.53
2,981.00	22.53	87.83	2,812.83	3.71	865.88	864.86	0.45	-0.42	-0.45
tie on point									
3,033.00	22.48	87.95	2,860.87	4.44	885.78	884.70	0.13	-0.10	0.23
3,128.00	23.67	85.34	2,948.27	6.64	922.93	921.72	1.65	1.25	-2.75
3,222.00	23.25	84.92	3,034.50	9.82	960.22	958.83	0.48	-0.45	-0.45
3,317.00	22.69	89.04	3,121.97	11.78	997.22	995.70	1.79	-0.59	4.34
3,411.00	23.13	90.04	3,208.56	12.07	1,033.81	1,032.25	0.62	0.47	1.06
3,506.00	23.81	93.16	3,295.70	11.00	1,071.62	1,070.06	1.49	0.72	3.28
3,600.00	22.00	92.67	3,382.28	9.14	1,108.15	1,106.65	1.94	-1.93	-0.52
3,694.00	22.69	93.04	3,469.22	7.36	1,143.85	1,142.38	0.75	0.73	0.39
3,789.00	21.44	92.29	3,557.26	5.69	1,179.49	1,178.07	1.35	-1.32	-0.79
3,883.00	21.25	91.17	3,644.82	4.66	1,213.69	1,212.28	0.48	-0.20	-1.19
3,978.00	23.19	90.42	3,732.76	4.17	1,249.61	1,248.18	2.06	2.04	-0.79
4,072.00	23.44	89.04	3,819.08	4.34	1,286.81	1,285.34	0.64	0.27	-1.47
4,167.00	22.94	88.54	3,906.41	5.13	1,324.21	1,322.67	0.57	-0.53	-0.53
4,261.00	22.94	87.54	3,992.97	6.39	1,360.83	1,359.19	0.41	0.00	-1.06
4,356.00	22.25	86.04	4,080.68	8.42	1,397.27	1,395.50	0.95	-0.73	-1.58
4,450.00	19.44	85.67	4,168.52	10.83	1,430.63	1,428.72	2.99	-2.99	-0.39
4,544.00	19.25	87.79	4,257.21	12.61	1,461.71	1,459.69	0.77	-0.20	2.26
4,639.00	19.13	92.04	4,346.94	12.66	1,492.92	1,490.87	1.48	-0.13	4.47
4,733.00	18.50	91.91	4,435.92	11.62	1,523.21	1,521.18	0.67	-0.67	-0.14
4,828.00	18.31	92.79	4,526.06	10.39	1,553.18	1,551.18	0.35	-0.20	0.93

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 921-21F4S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Site:	UINTAH_NBU 921-21E PAD	**MD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Well:	NBU 921-21F4S	**North Reference:**	True
Wellbore:	NBU 921-21F4S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21F4S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,923.00	20.06	94.04	4,615.78	8.51	1,584.34	1,582.39	1.89	1.84	1.32
5,017.00	19.63	91.54	4,704.20	6.95	1,616.21	1,614.29	1.01	-0.46	-2.66
5,112.00	18.44	91.04	4,794.00	6.25	1,647.18	1,645.27	1.26	-1.25	-0.53
5,206.00	15.44	91.29	4,883.91	5.70	1,674.56	1,672.64	3.19	-3.19	0.27
5,300.00	14.19	91.54	4,974.79	5.11	1,698.59	1,696.67	1.33	-1.33	0.27
5,395.00	13.75	91.54	5,066.98	4.49	1,721.52	1,719.61	0.46	-0.46	0.00
5,489.00	12.81	91.54	5,158.46	3.91	1,743.10	1,741.19	1.00	-1.00	0.00
5,584.00	11.63	96.29	5,251.31	2.58	1,763.15	1,761.28	1.63	-1.24	5.00
5,679.00	9.63	98.92	5,344.67	0.30	1,780.52	1,778.73	2.17	-2.11	2.77
5,773.00	7.75	99.41	5,437.59	-1.96	1,794.54	1,792.84	2.00	-2.00	0.52
5,869.00	6.19	89.42	5,532.88	-2.96	1,806.10	1,804.44	2.05	-1.63	-10.41
5,962.00	3.69	95.17	5,625.53	-3.18	1,814.10	1,812.44	2.74	-2.69	6.18
6,057.00	1.50	90.54	5,720.43	-3.47	1,818.39	1,816.73	2.31	-2.31	-4.87
6,152.00	0.31	192.67	5,815.42	-3.73	1,819.57	1,817.93	1.68	-1.25	107.51
6,246.00	0.44	198.79	5,909.41	-4.32	1,819.40	1,817.78	0.14	0.14	6.51
6,341.00	0.44	199.29	6,004.41	-5.01	1,819.16	1,817.58	0.00	0.00	0.53
6,435.00	0.25	167.16	6,098.41	-5.55	1,819.09	1,817.53	0.28	-0.20	-34.18
6,530.00	0.44	192.67	6,193.41	-6.11	1,819.06	1,817.52	0.25	0.20	26.85
6,624.00	0.63	199.29	6,287.40	-6.95	1,818.81	1,817.31	0.21	0.20	7.04
6,718.00	0.50	72.29	6,381.40	-7.31	1,819.03	1,817.54	1.08	-0.14	-135.11
6,813.00	0.81	89.42	6,476.40	-7.18	1,820.09	1,818.60	0.38	0.33	18.03
6,907.00	1.06	96.04	6,570.38	-7.26	1,821.62	1,820.13	0.29	0.27	7.04
7,002.00	0.50	62.17	6,665.37	-7.16	1,822.86	1,821.37	0.74	-0.59	-35.65
7,096.00	0.19	76.79	6,759.37	-6.94	1,823.38	1,821.87	0.34	-0.33	15.55
7,191.00	0.31	104.54	6,854.37	-6.96	1,823.78	1,822.27	0.18	0.13	29.21
7,285.00	0.69	153.79	6,948.37	-7.54	1,824.27	1,822.80	0.58	0.40	52.39
7,381.00	0.81	152.17	7,044.36	-8.66	1,824.85	1,823.42	0.13	0.13	-1.69
7,474.00	1.13	142.04	7,137.35	-9.96	1,825.72	1,824.35	0.39	0.34	-10.89
7,569.00	1.38	145.41	7,232.32	-11.64	1,826.94	1,825.65	0.27	0.26	3.55
7,663.00	1.44	156.29	7,326.30	-13.65	1,828.06	1,826.85	0.29	0.06	11.57
7,758.00	0.75	187.54	7,421.28	-15.36	1,828.46	1,827.33	0.94	-0.73	32.89
7,852.00	1.06	318.17	7,515.27	-15.32	1,827.80	1,826.66	1.75	0.33	138.97
7,947.00	1.94	322.17	7,610.24	-13.40	1,826.23	1,825.01	0.93	0.93	4.21
8,042.00	1.75	328.67	7,705.19	-10.89	1,824.49	1,823.16	0.30	-0.20	6.84
8,136.00	1.63	327.92	7,799.15	-8.53	1,823.03	1,821.60	0.13	-0.13	-0.80
8,230.00	1.50	324.17	7,893.11	-6.40	1,821.60	1,820.07	0.18	-0.14	-3.99
8,325.00	1.06	322.92	7,988.09	-4.69	1,820.34	1,818.74	0.46	-0.46	-1.32
8,420.00	1.06	329.67	8,083.07	-3.23	1,819.37	1,817.70	0.13	0.00	7.11
8,514.00	0.38	318.42	8,177.07	-2.25	1,818.72	1,817.01	0.74	-0.72	-11.97
8,609.00	0.13	296.54	8,272.07	-1.97	1,818.42	1,816.70	0.28	-0.26	-23.03
8,703.00	0.13	30.92	8,366.07	-1.83	1,818.38	1,816.65	0.20	0.00	100.40
8,798.00	0.13	88.42	8,461.06	-1.73	1,818.54	1,816.81	0.13	0.00	60.53
8,892.00	0.38	168.17	8,555.06	-2.03	1,818.71	1,816.99	0.40	0.27	84.84

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 921-21F4S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Site:	UINTAH_NBU 921-21E PAD	**MD Reference:**	4838 GL + 26' RKB @ 4864.00ft (h&p 298)
Well:	NBU 921-21F4S	**North Reference:**	True
Wellbore:	NBU 921-21F4S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21F4S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,986.00	0.50	125.67	8,649.06	-2.58	1,819.11	1,817.41	0.36	0.13	-45.21
9,081.00	0.81	134.16	8,744.06	-3.29	1,819.92	1,818.26	0.34	0.33	8.94
9,175.00	0.69	132.17	8,838.05	-4.13	1,820.82	1,819.19	0.13	-0.13	-2.12
9,364.00	0.88	136.79	9,027.03	-5.95	1,822.66	1,821.11	0.11	0.10	2.44
9,458.00	1.13	131.67	9,121.01	-7.09	1,823.84	1,822.35	0.28	0.27	-5.45
9,553.00	1.38	145.17	9,215.99	-8.66	1,825.20	1,823.77	0.41	0.26	14.21
9,648.00	1.25	163.42	9,310.97	-10.59	1,826.15	1,824.80	0.46	-0.14	19.21
9,837.00	1.38	158.67	9,499.92	-14.68	1,827.56	1,826.40	0.09	0.07	-2.51
9,931.00	1.25	166.04	9,593.89	-16.73	1,828.22	1,827.15	0.23	-0.14	7.84
10,026.00	1.25	181.67	9,688.87	-18.77	1,828.44	1,827.46	0.36	0.00	16.45
10,120.00	1.81	182.92	9,782.84	-21.28	1,828.34	1,827.47	0.60	0.60	1.33
10,227.00	1.56	184.79	9,889.79	-24.42	1,828.13	1,827.40	0.24	-0.23	1.75
10,322.00	1.75	179.67	9,984.75	-27.16	1,828.03	1,827.42	0.25	0.20	-5.39
10,416.00	1.56	184.42	10,078.71	-29.87	1,827.94	1,827.45	0.25	-0.20	5.05
10,511.00	1.75	180.17	10,173.67	-32.61	1,827.83	1,827.47	0.24	0.20	-4.47
10,605.00	2.44	181.79	10,267.61	-36.05	1,827.77	1,827.56	0.74	0.73	1.72
10,700.00	2.56	179.04	10,362.52	-40.19	1,827.74	1,827.71	0.18	0.13	-2.89
10,794.00	2.56	179.92	10,456.42	-44.39	1,827.78	1,827.94	0.04	0.00	0.94
10,888.00	2.38	174.92	10,550.34	-48.43	1,827.95	1,828.30	0.30	-0.19	-5.32
10,983.00	2.56	173.29	10,645.25	-52.50	1,828.38	1,828.90	0.20	0.19	-1.72
11,077.00	2.69	168.79	10,739.15	-56.75	1,829.05	1,829.76	0.26	0.14	-4.79
11,172.00	2.81	166.79	10,834.04	-61.20	1,830.02	1,830.93	0.16	0.13	-2.11
11,266.00	3.00	162.54	10,927.92	-65.79	1,831.28	1,832.39	0.31	0.20	-4.52
11,361.00	3.13	159.79	11,022.78	-70.60	1,832.92	1,834.25	0.21	0.14	-2.89
11,455.00	3.38	156.04	11,116.63	-75.54	1,834.93	1,836.48	0.35	0.27	-3.99
11,514.00	3.42	156.27	11,175.53	-78.74	1,836.35	1,838.03	0.07	0.07	0.39
last mwd survey									
11,574.00	3.42	156.27	11,235.42	-82.02	1,837.79	1,839.62	0.00	0.00	0.00
projection									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,981.00	2,812.83	3.71	865.88	tie on point
11,514.00	11,175.53	-78.74	1,836.35	last mwd survey
11,574.00	11,235.42	-82.02	1,837.79	projection

Checked By: _____ Approved By: _____ Date: _____